

2023 Water Survey Results

Black & Veatch Market Insights Group



Table of Contents

Study Overview	<u>3</u>
Firmographics	<u>5</u>
Industry Overview	<u>10</u>
Sustainability & Decarbonization	<u>20</u>
Outsourcing & Workforce	<u>42</u>
Funding Alternatives	<u>50</u>
Rates	<u>64</u>
Water Supply	<u>76</u>
Climate Change	<u>94</u>
Cybersecurity	<u>109</u>
Digital Water	<u>129</u>
Contaminants	<u>142</u>

Study Overview

Methodology

- Administered online from Feb 9, 2023 through March 3, 2023.
- Black & Veatch was identified as the sponsor of the study.
- Weekly email reminders were sent to encourage participation.
- As part of their participation, survey-takers received the full analysis of the results; no monetary incentives were promised or issued.

Sampling Plan

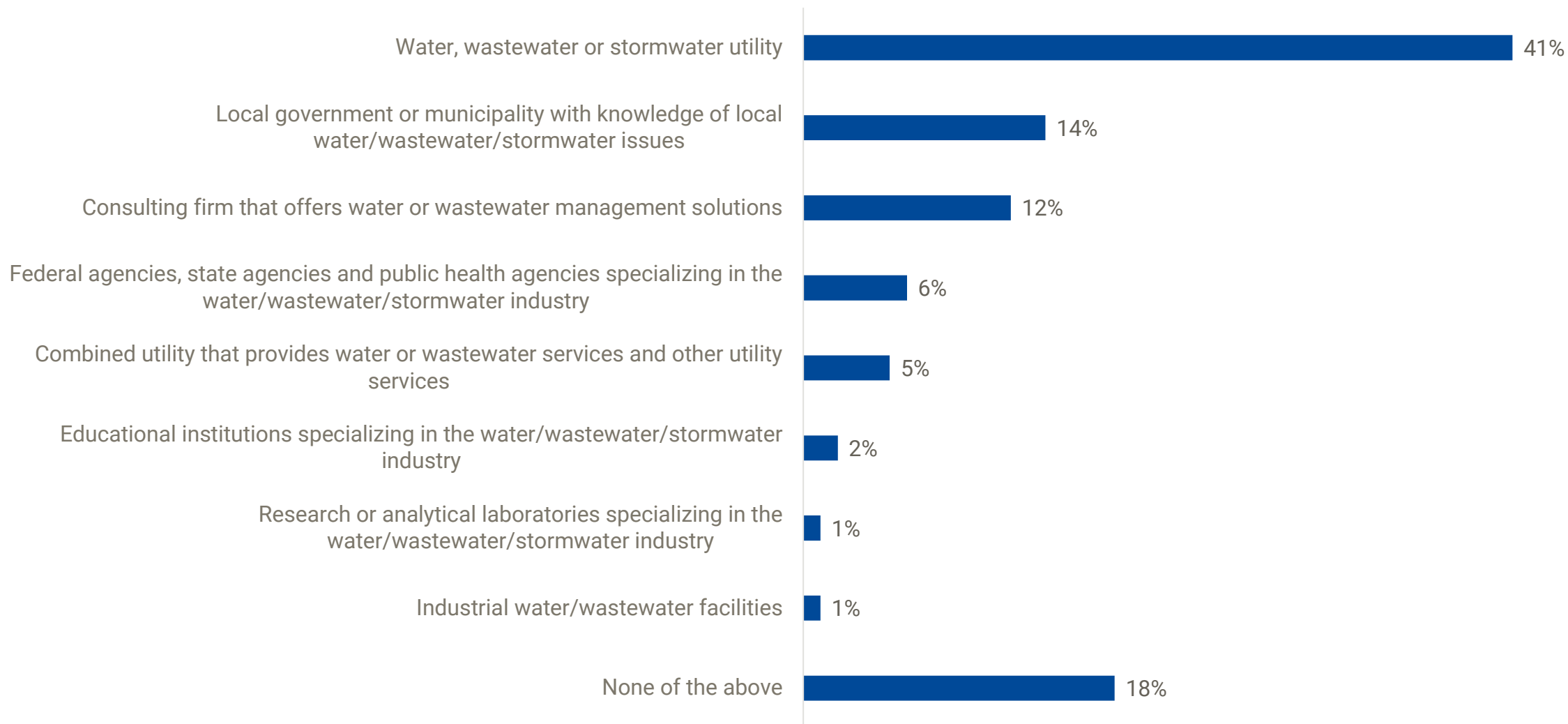
- Screening questions were included at the beginning of the survey to ensure only qualified participants were allowed to complete the survey.
- Respondents were asked to indicate their knowledge and/or involvement in specific survey topics to determine which section(s) they would receive.
- Both utilities and non-utilities were included in the sample.
- About 48,000 email invitations were deployed to professionals across the United States.

Survey Results

- 450 survey respondents qualified and completed their given survey.
- Overall response rate for the survey was 1 percent.
- Because the survey was administered online, the amount of self-selection bias is unknown, therefore, no estimates of sampling error have been calculated.
- Some data cuts have a small base size and a notation indicating such has been included.
- **Data resulting from small base sizes should be used directionally. Caution must be used when interpreting results using small base sizes.**

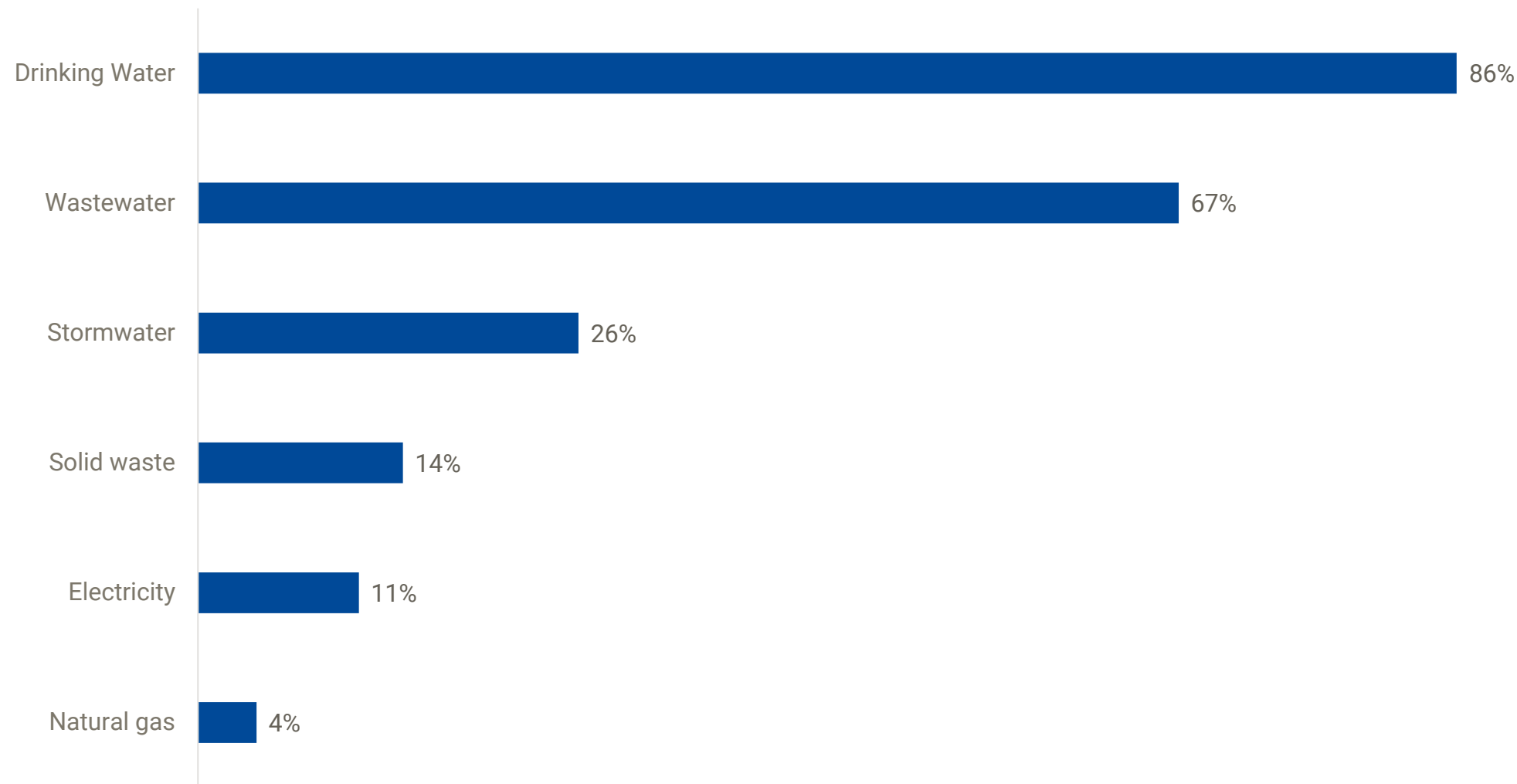
Firmographics

Q2 Which of the following BEST describes your organization? (Select one)



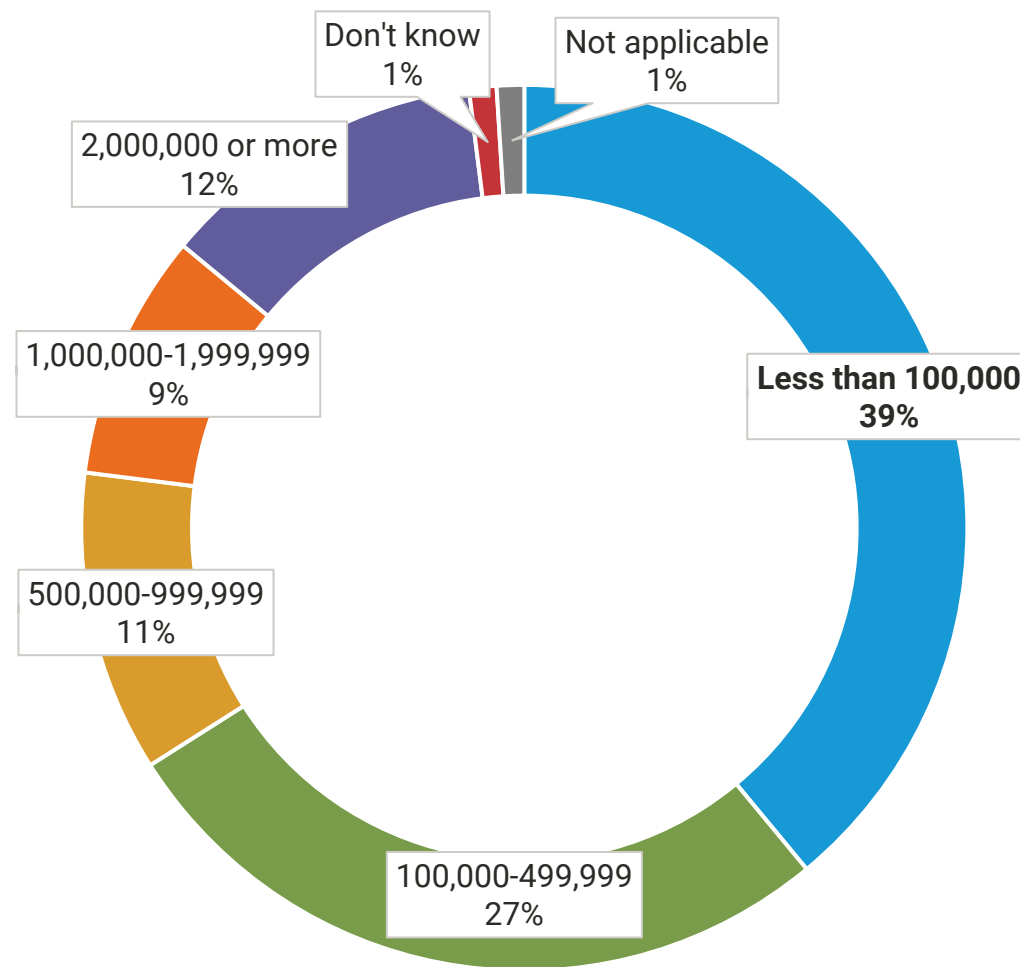
Base=450

Q4 - Please identify all of the services provided by your utility. (Select all that apply)



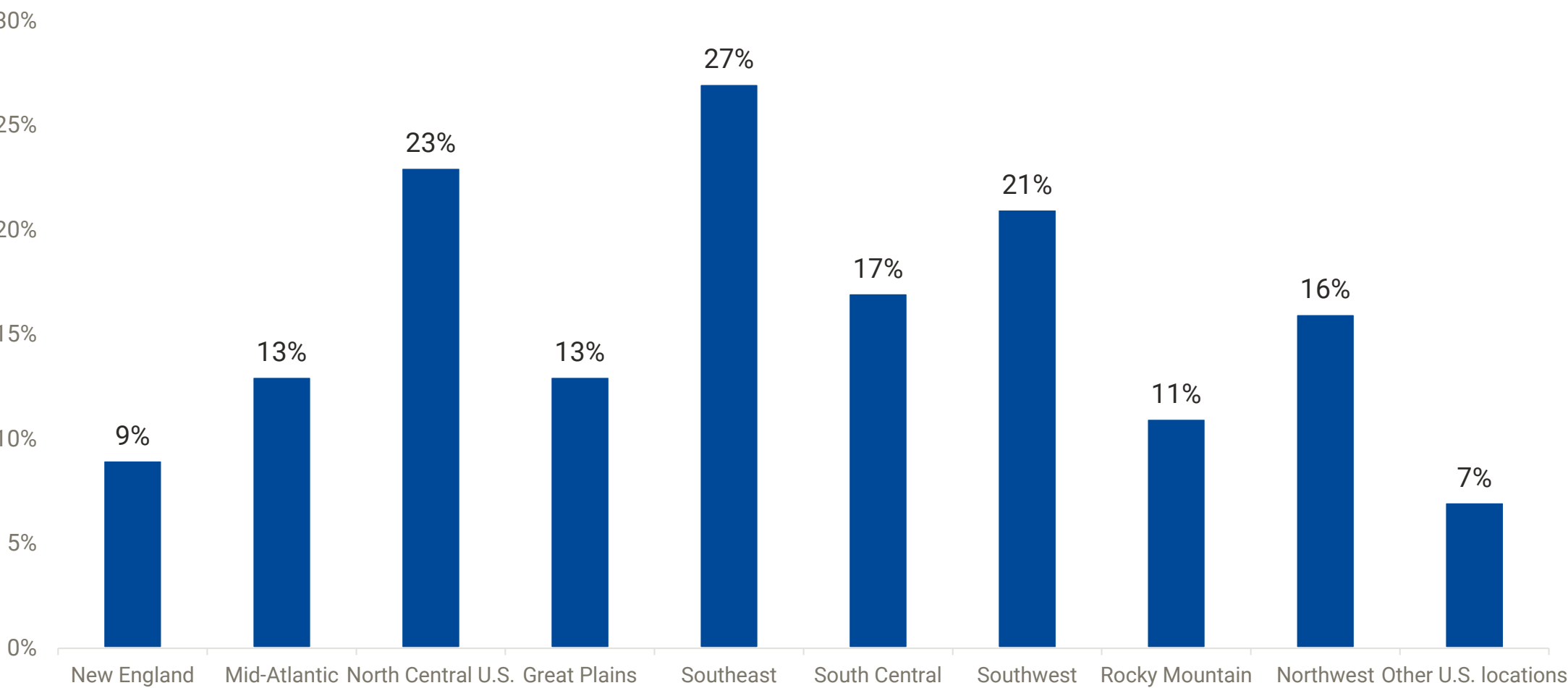
Base=211

Q5 - What is the estimated population served by your organization? (Select one)



Base=276

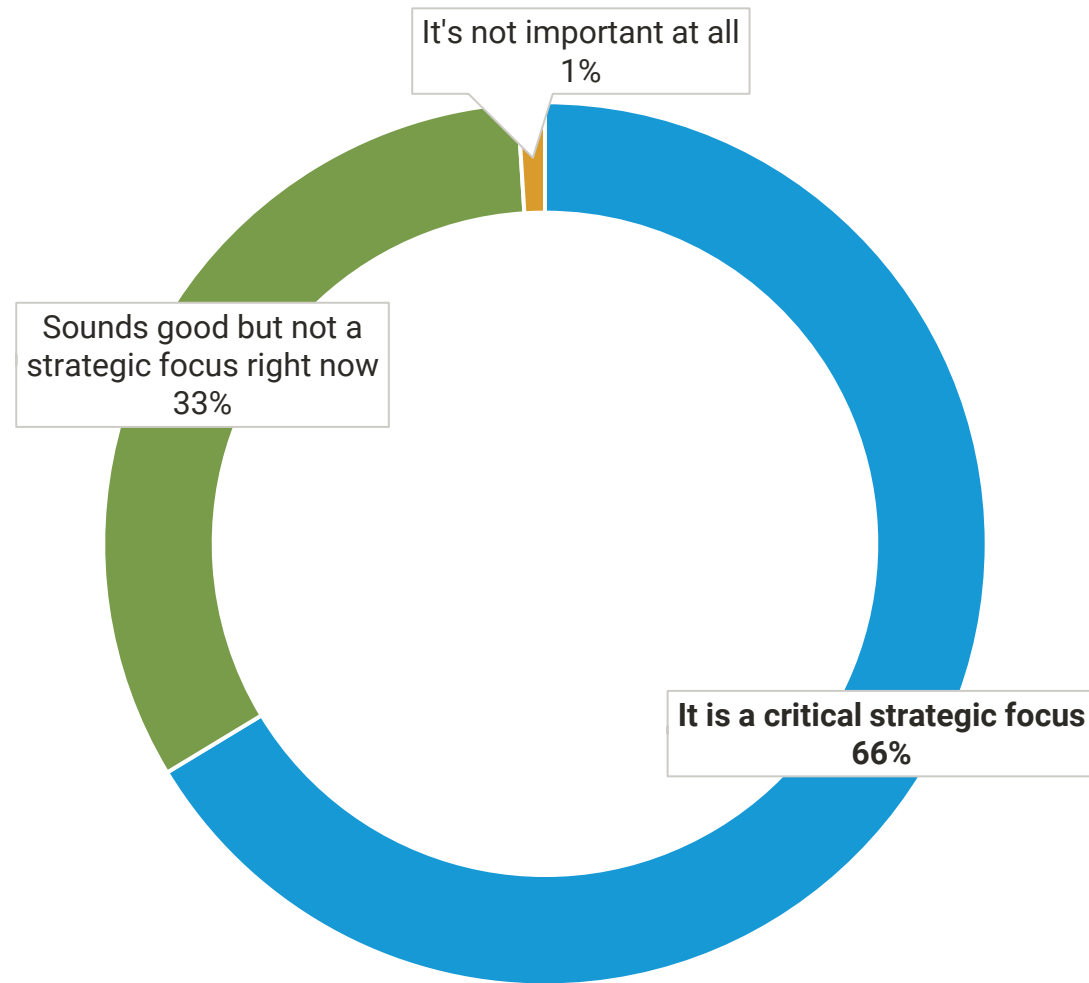
Q10 - In which regions of the United States is your organization located and/or provides services?
(Select ALL that apply)



Base=368

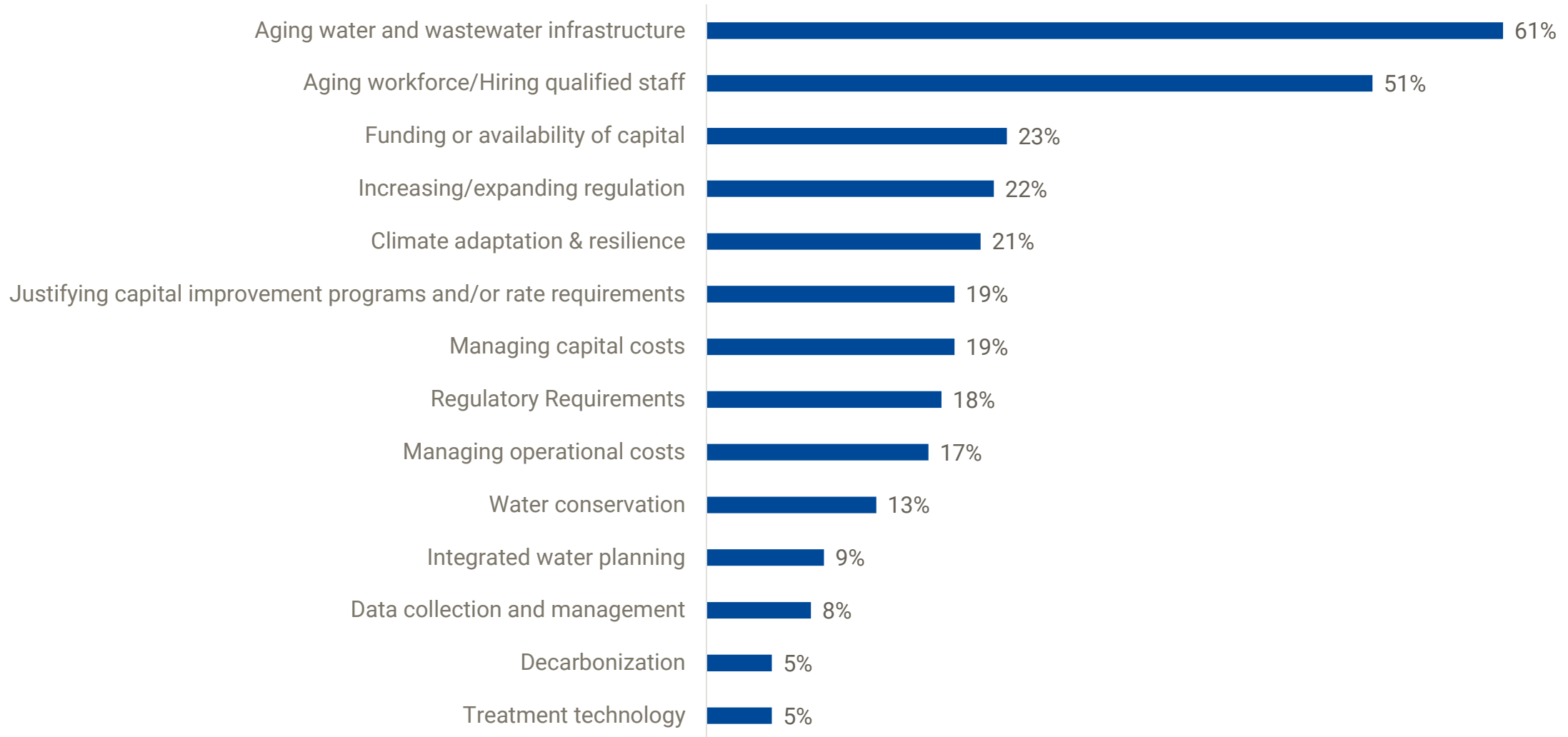
Industry Overview

Q9 - What is the importance of sustainability within the water utility industry? (Select one)



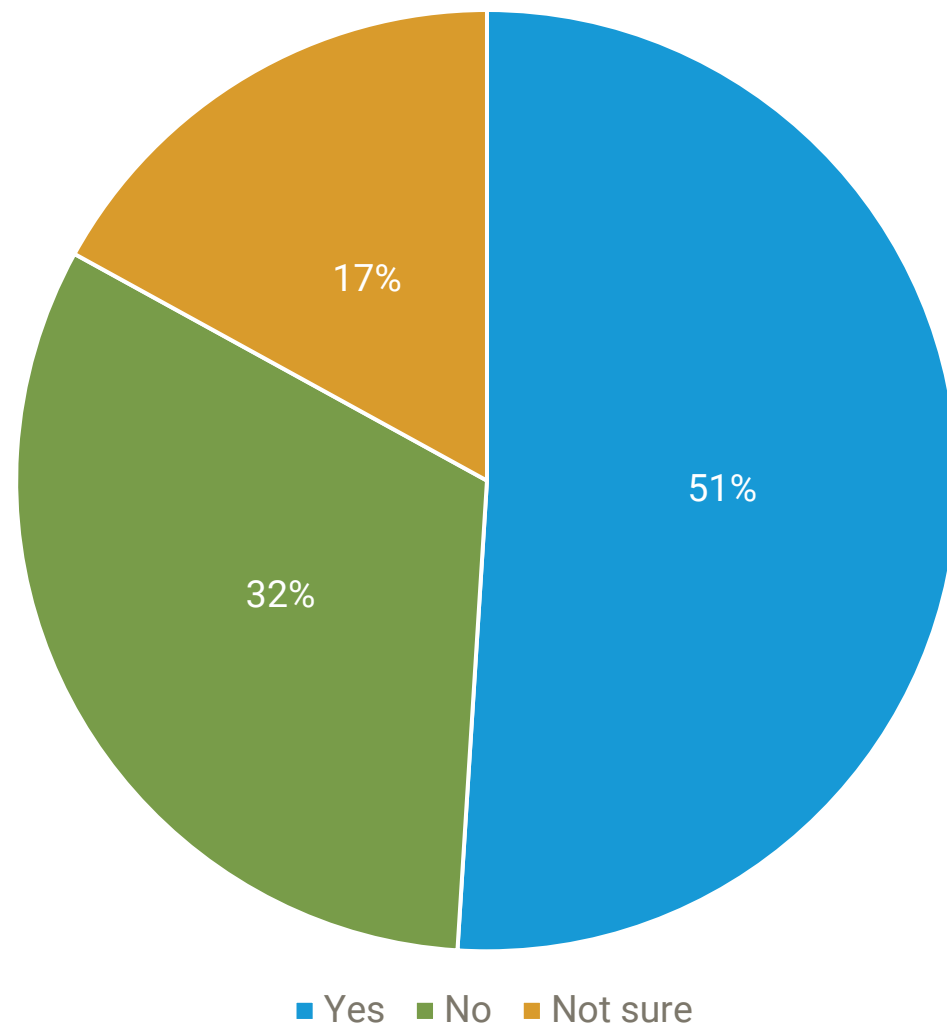
Base=368

Q6 - From your perspective, what are the most challenging issues facing the water, wastewater, and stormwater industry today? (Select the TOP THREE most challenging issues)



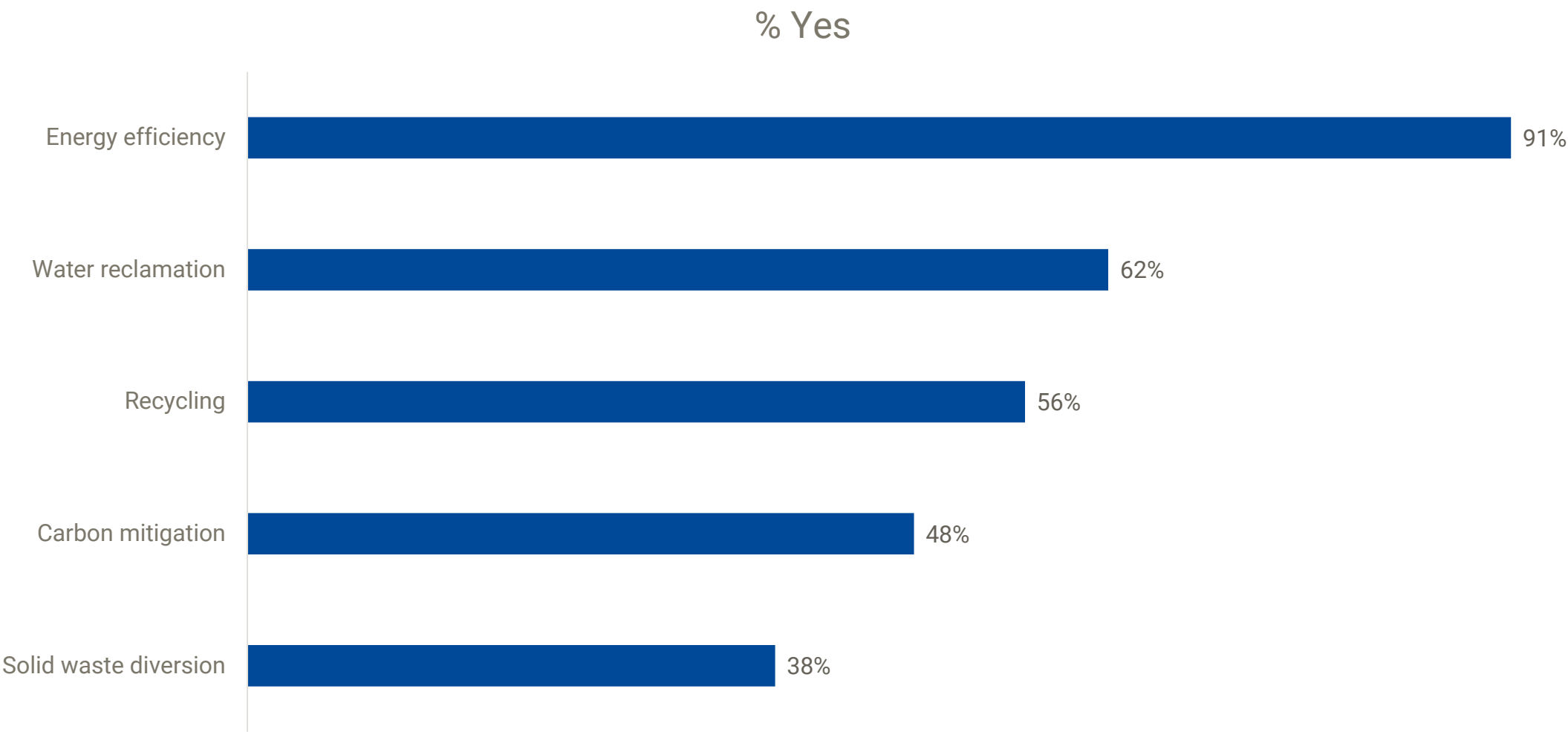
Base=368

Q7 - Does your organization have sustainability goals and associated performance metrics?
(Select one)



Base=276

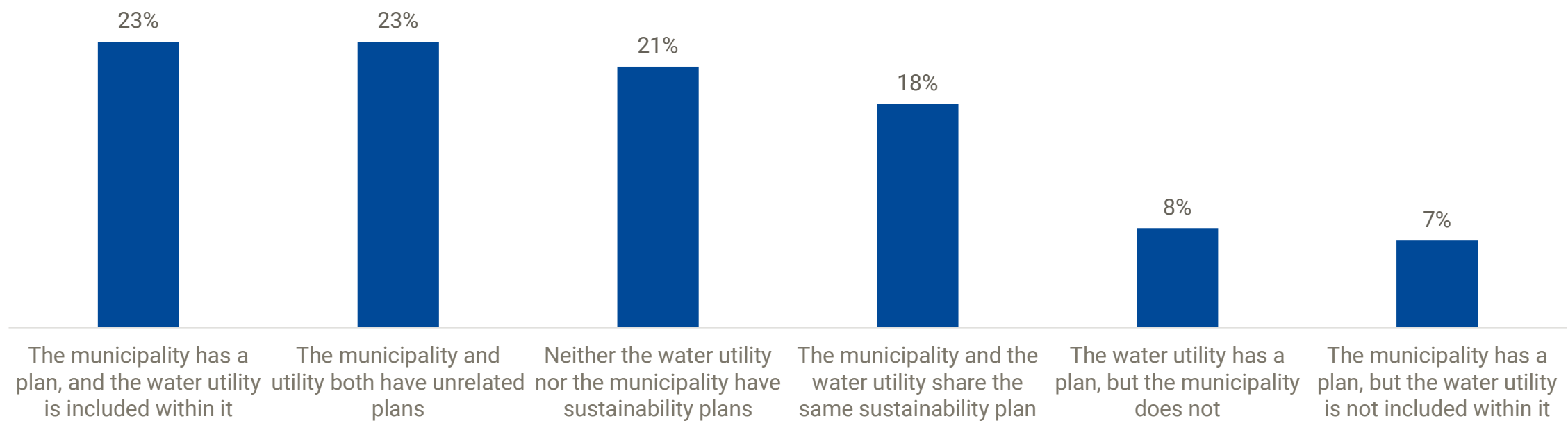
Q8 - Do those goals and metrics include the following? (Select one for each)



Base=368

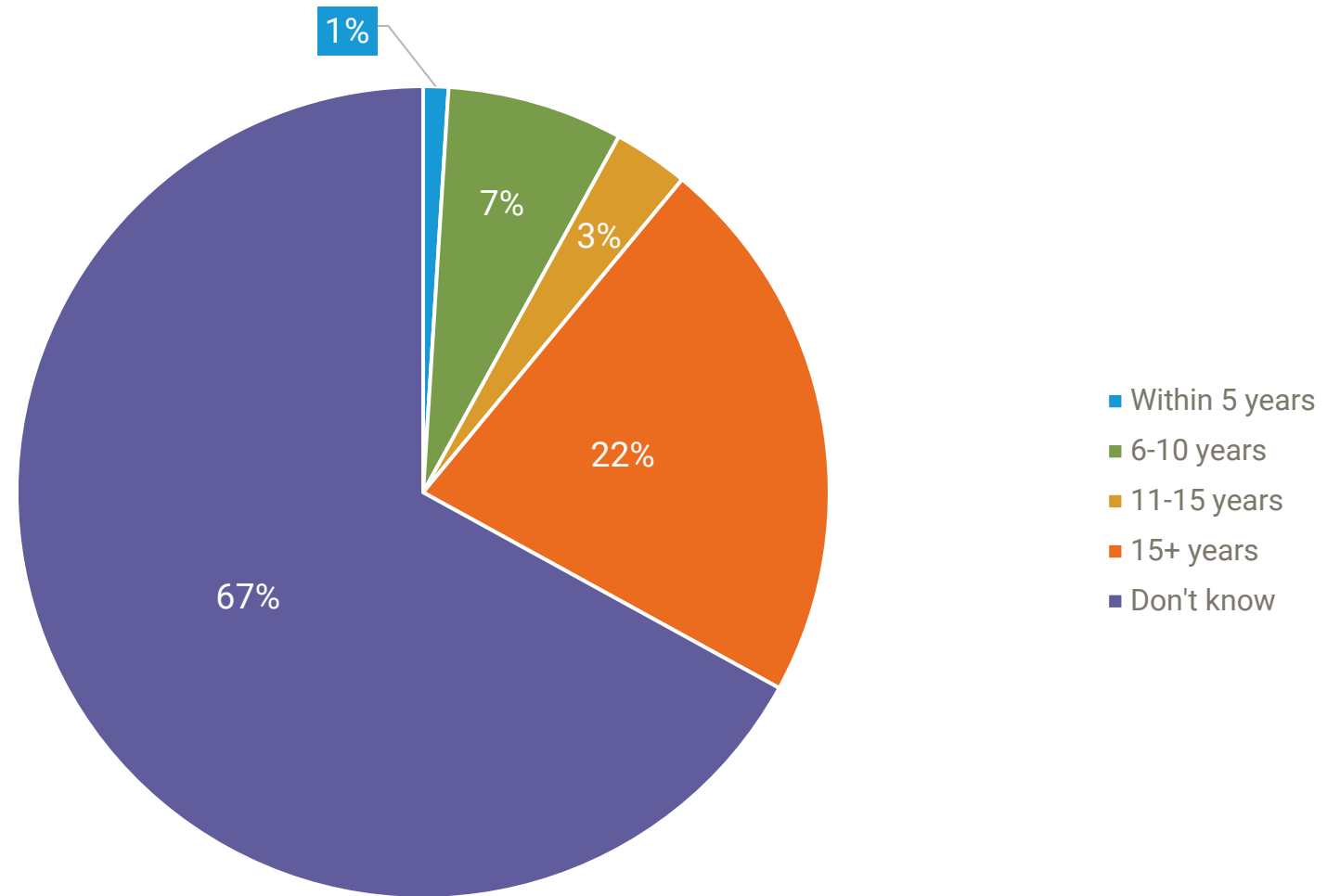
Sustainability & Decarbonization

Q13 - Which of the following situations best describe sustainability planning for your municipality and the water utility? (Select one)



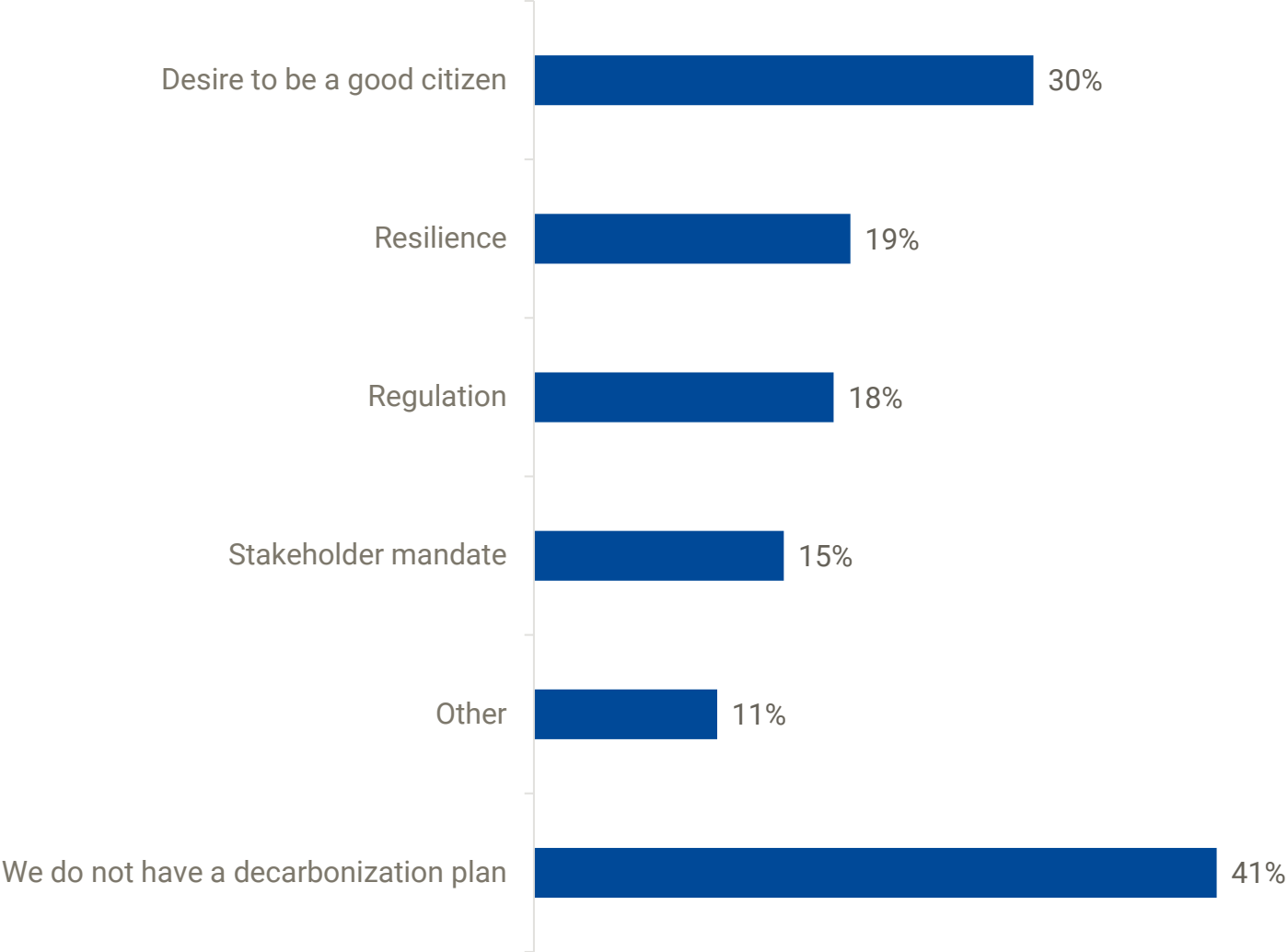
Base=73

Q14 - When do you expect to be carbon neutral? (Select one)



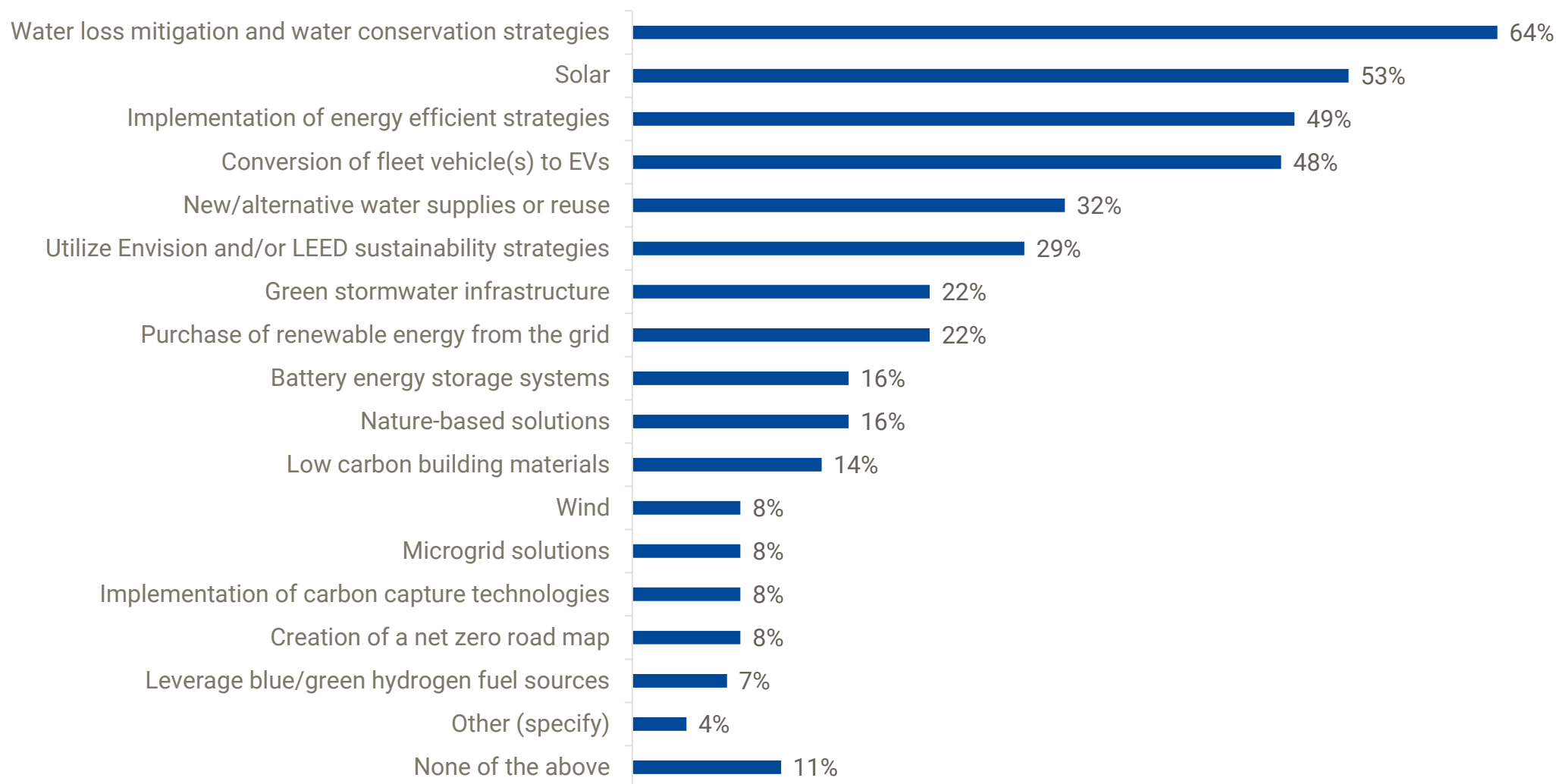
Base=73

Q15 - What have been the biggest drivers of your decarbonization plan? (Select all that apply)



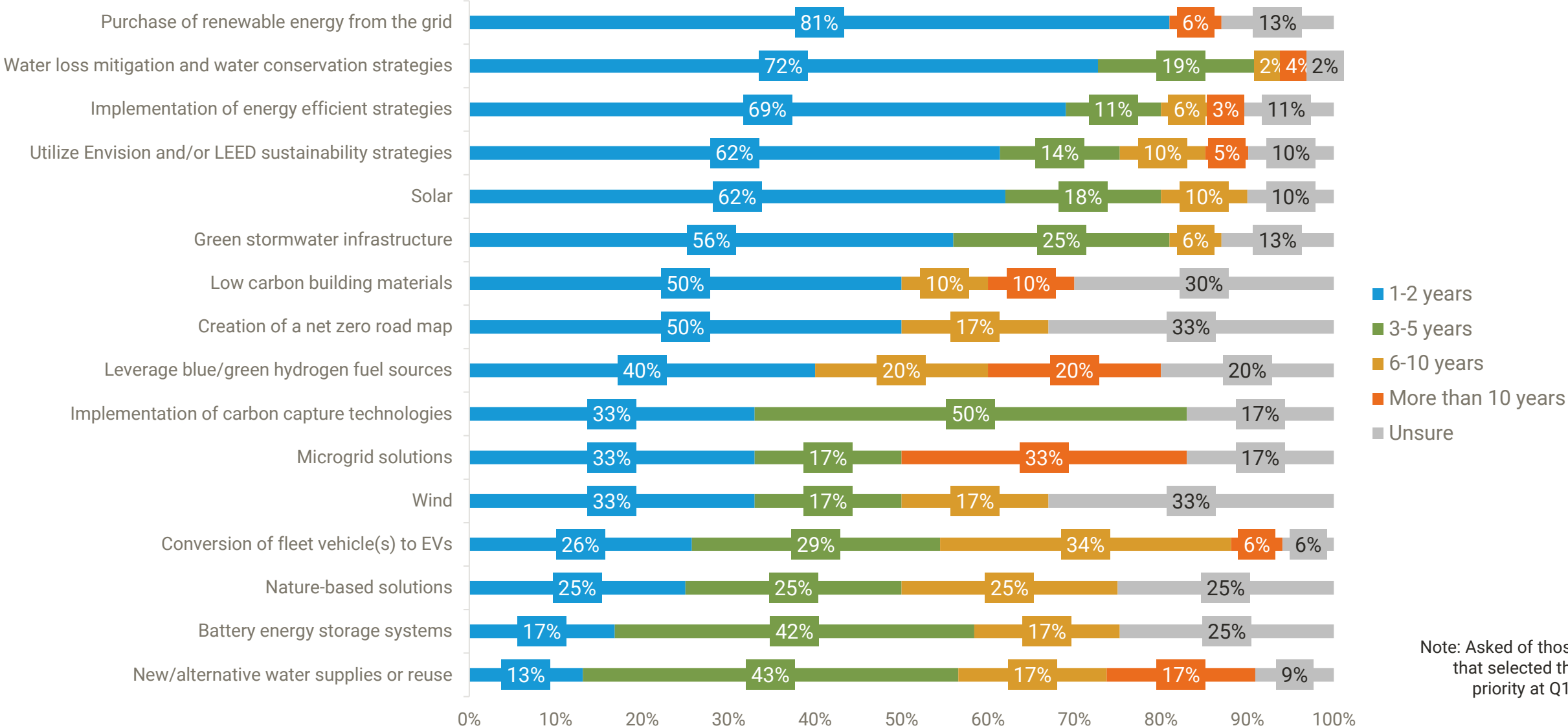
Base=73

Q16 - What climate mitigation or adaptation strategies is your utility pursuing or planning to pursue? (Select all that apply)



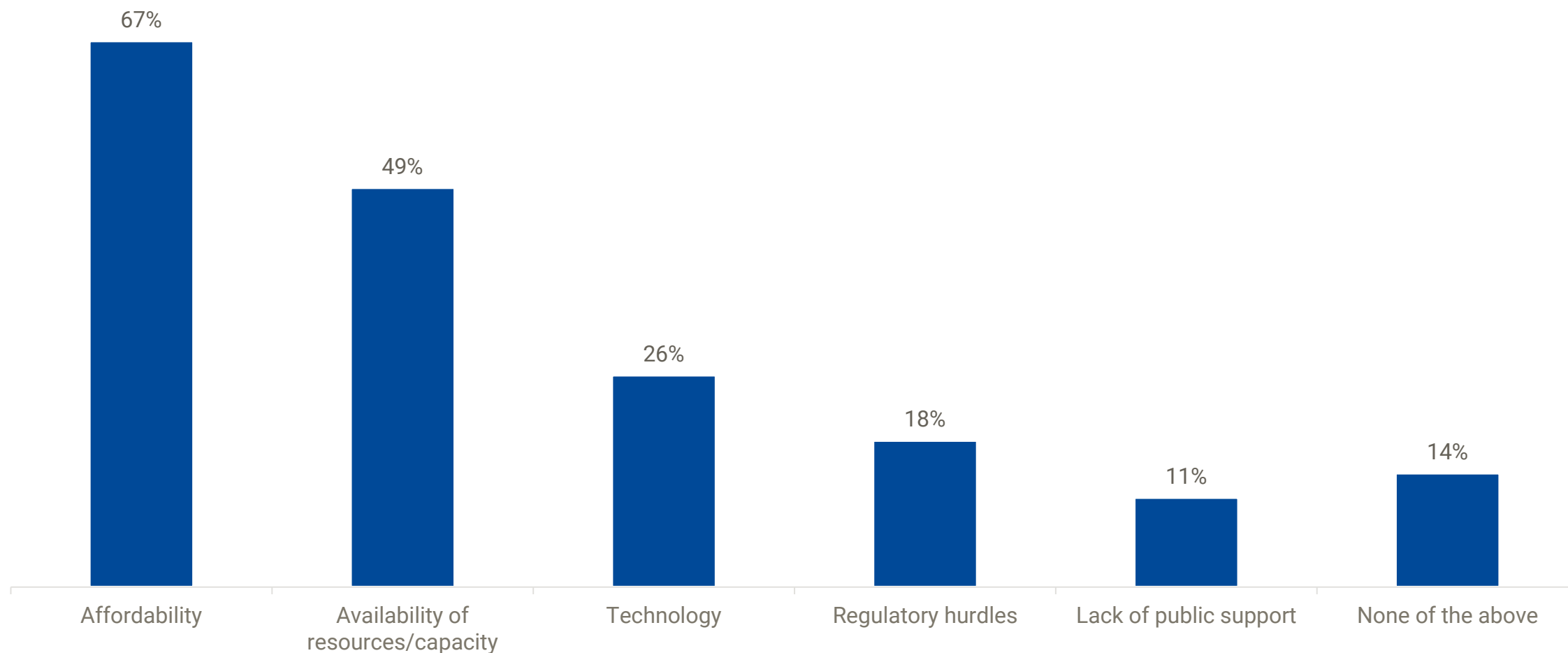
Base=73

Q17 - What is your timeframe for implementation of each priority? (Select one for each)



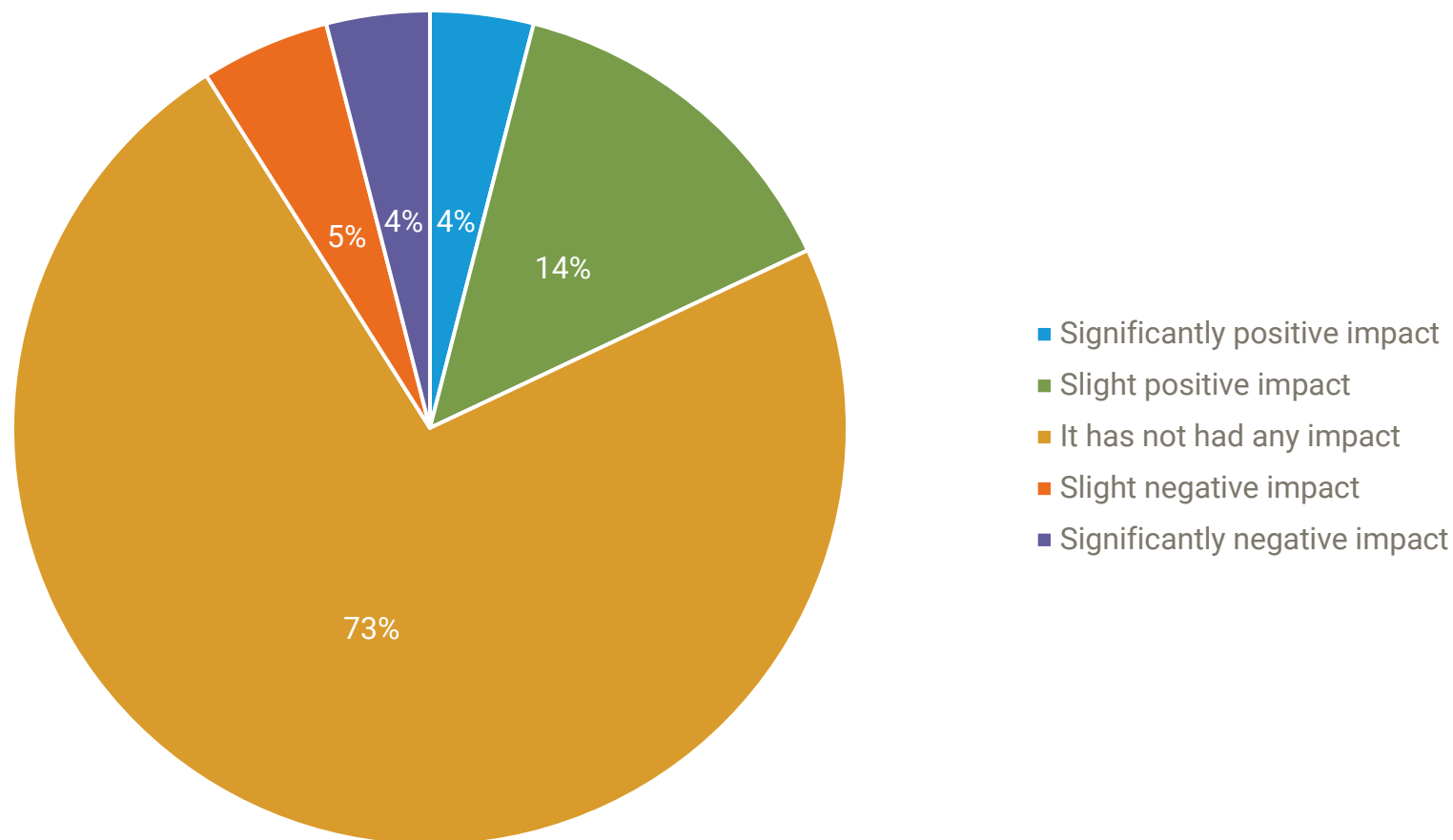
Note: Asked of those that selected the priority at Q16

Q18 - What are your biggest hurdles in achieving your sustainability strategy? (Select all that apply)



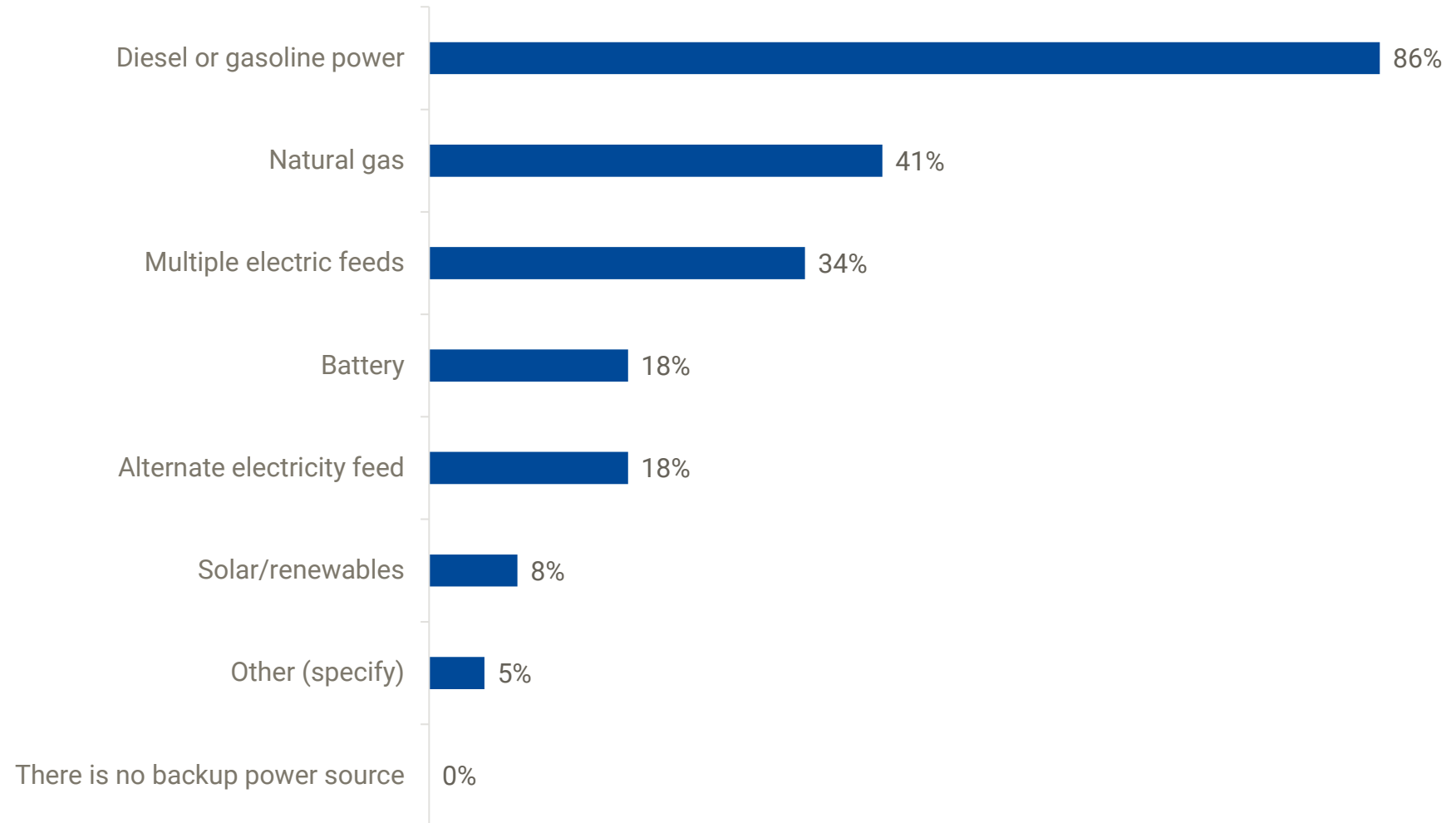
Base=73

Q19 - How has the recently passed IIJA/BIL legislation affected your decarbonization plan?
(Select one)



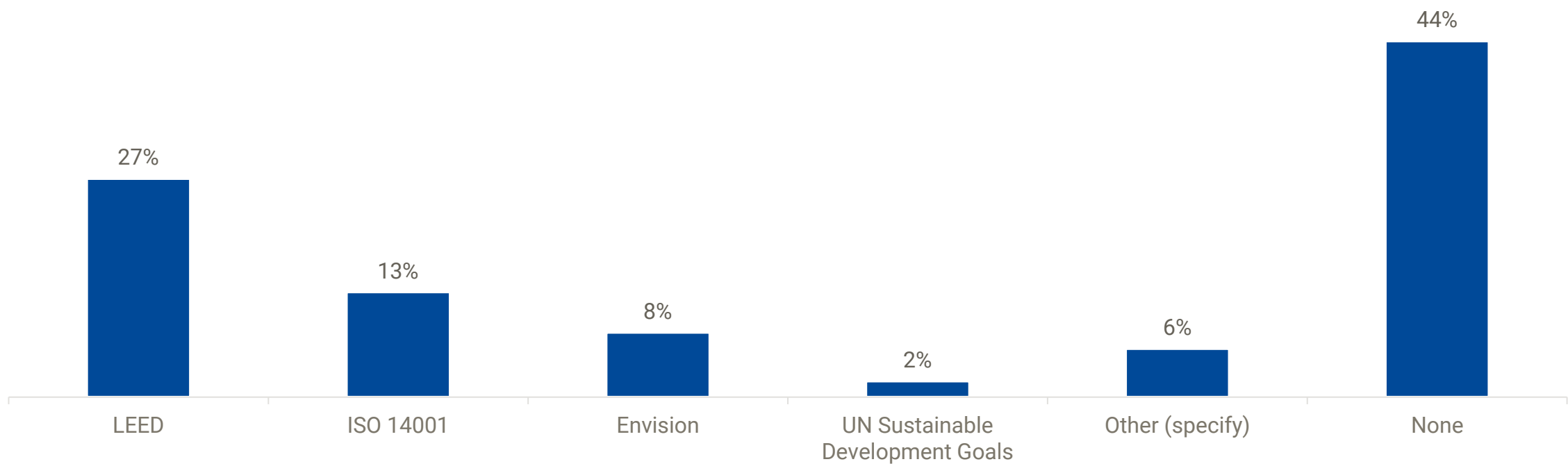
Base=73

Q20 - Which of the following backup power sources would your utility rely on in the event of an unplanned outage? (Select all that apply)



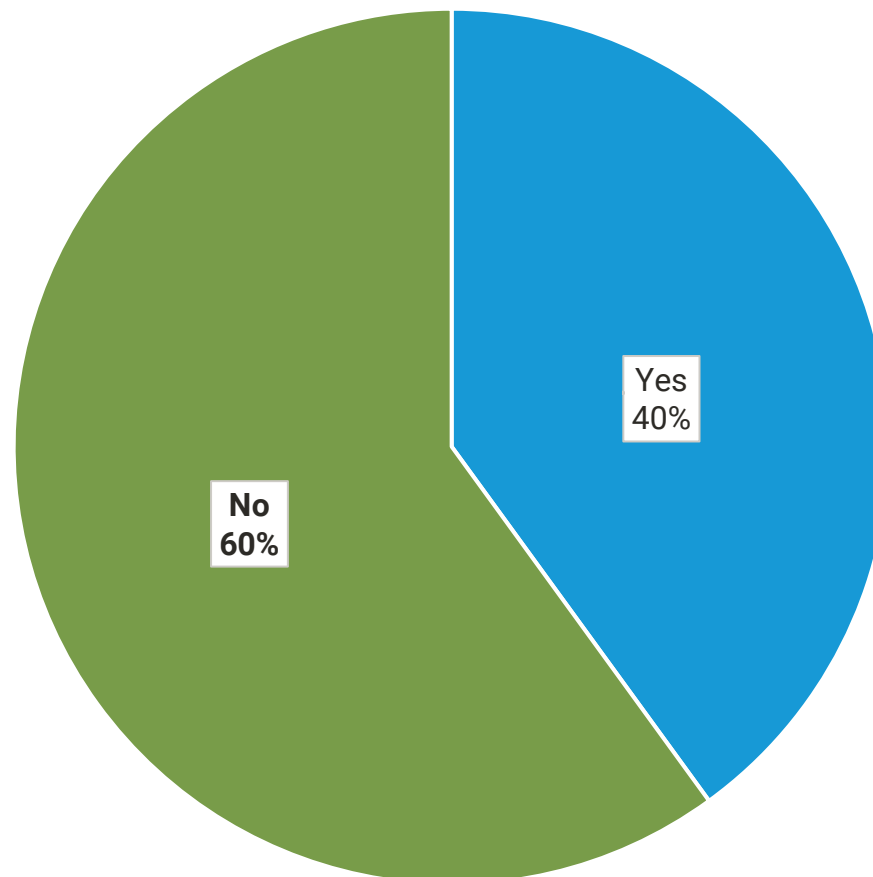
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Q21 - What sustainability certification or framework, if any, are you using? (Select all that apply)



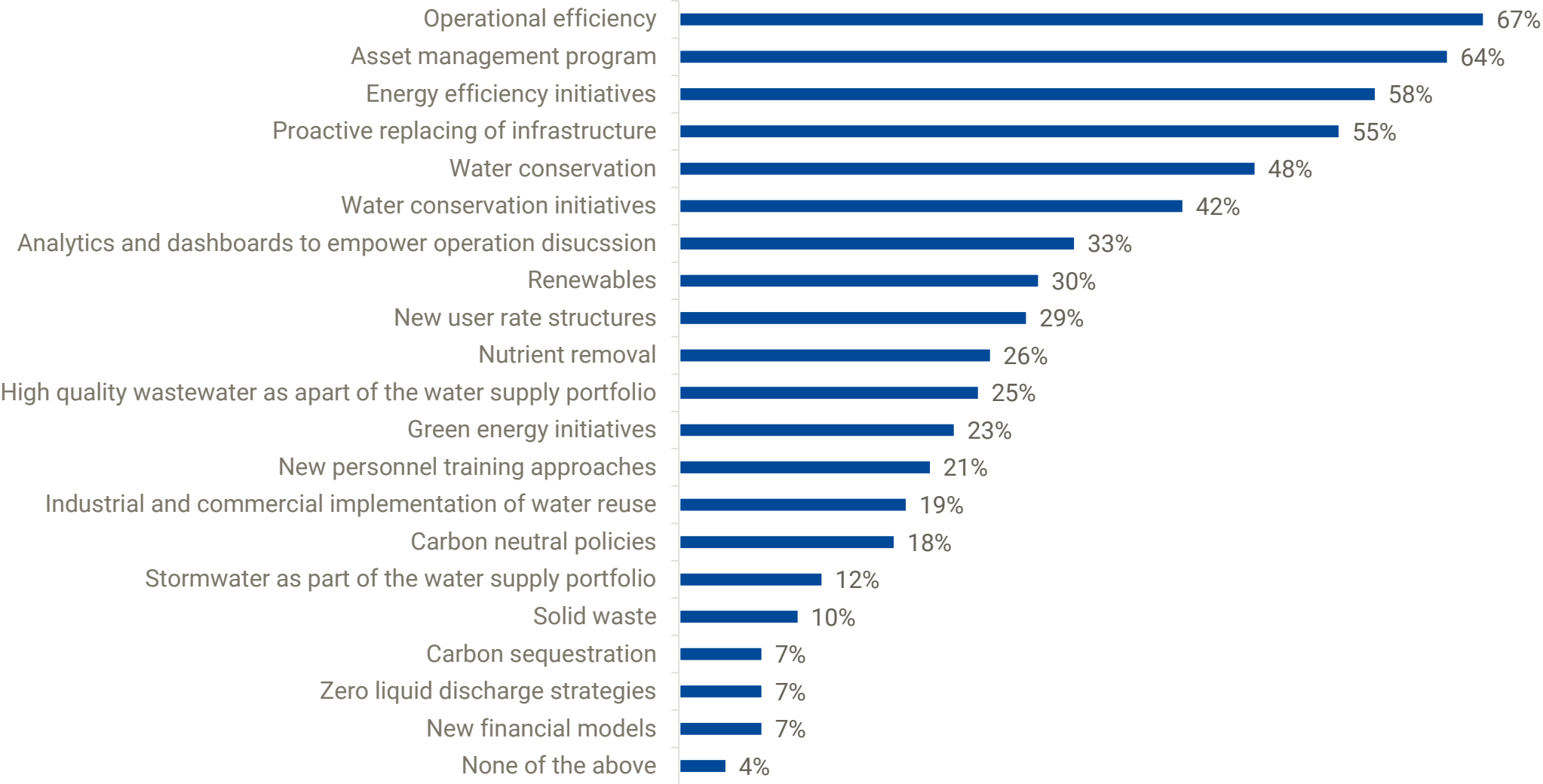
Base=73

Q22 - Is your utility experiencing pressure from the community/regulatory agencies to adopt sustainable practices? (Select one)



Base=73

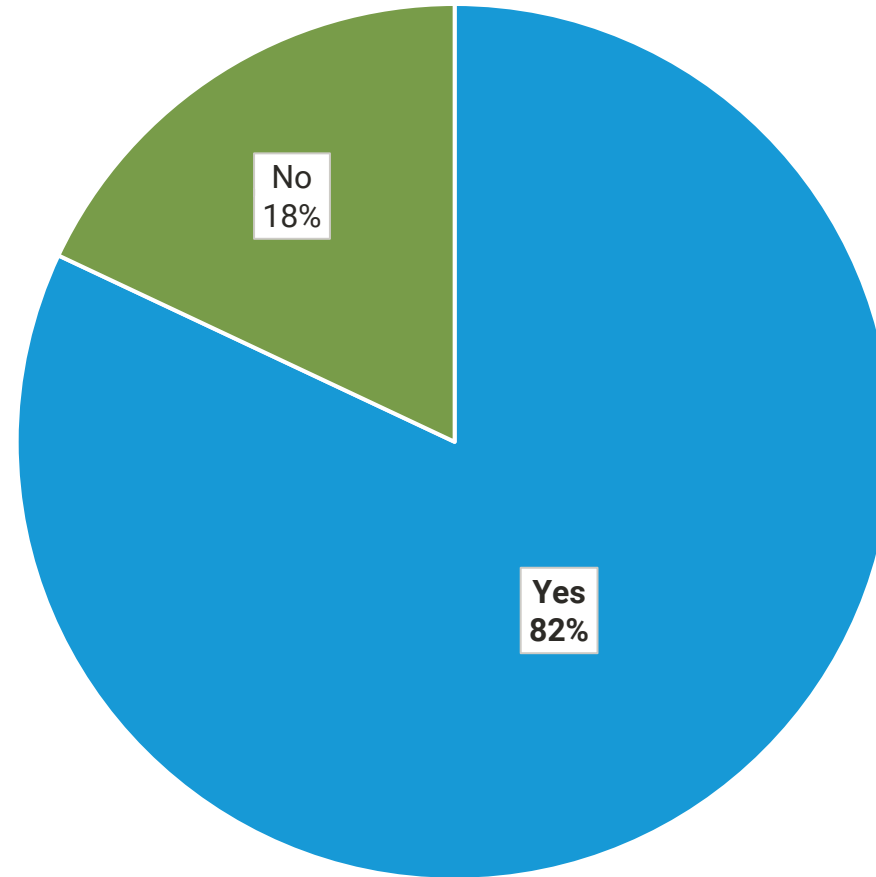
Q23 - What efforts is your utility practicing to enhance sustainability? (Select all that apply)



Base=73

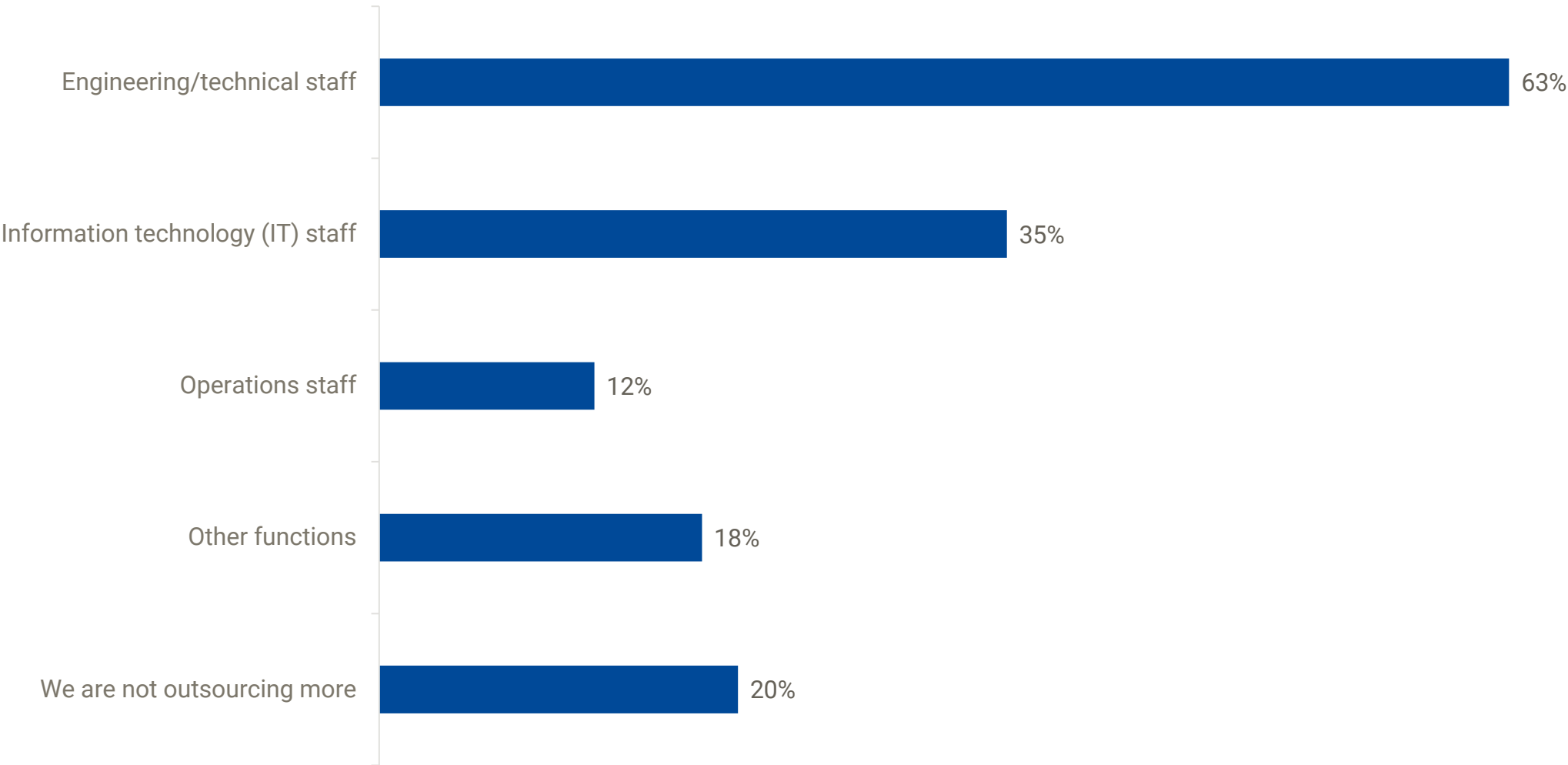
Outsourcing & Workforce

Q25 - Is your utility experiencing an increase in retirements or people leaving? (Select one)



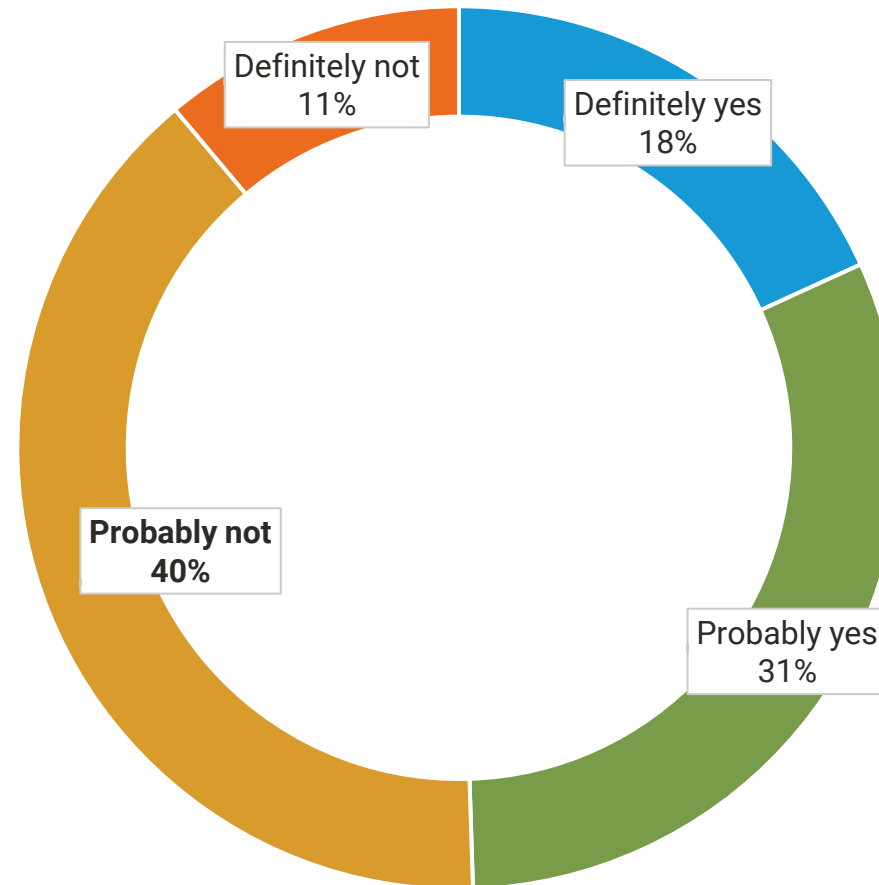
Base=73

Q27 - Which functions, if any, are you outsourcing more? (Select all that apply)



Base=99

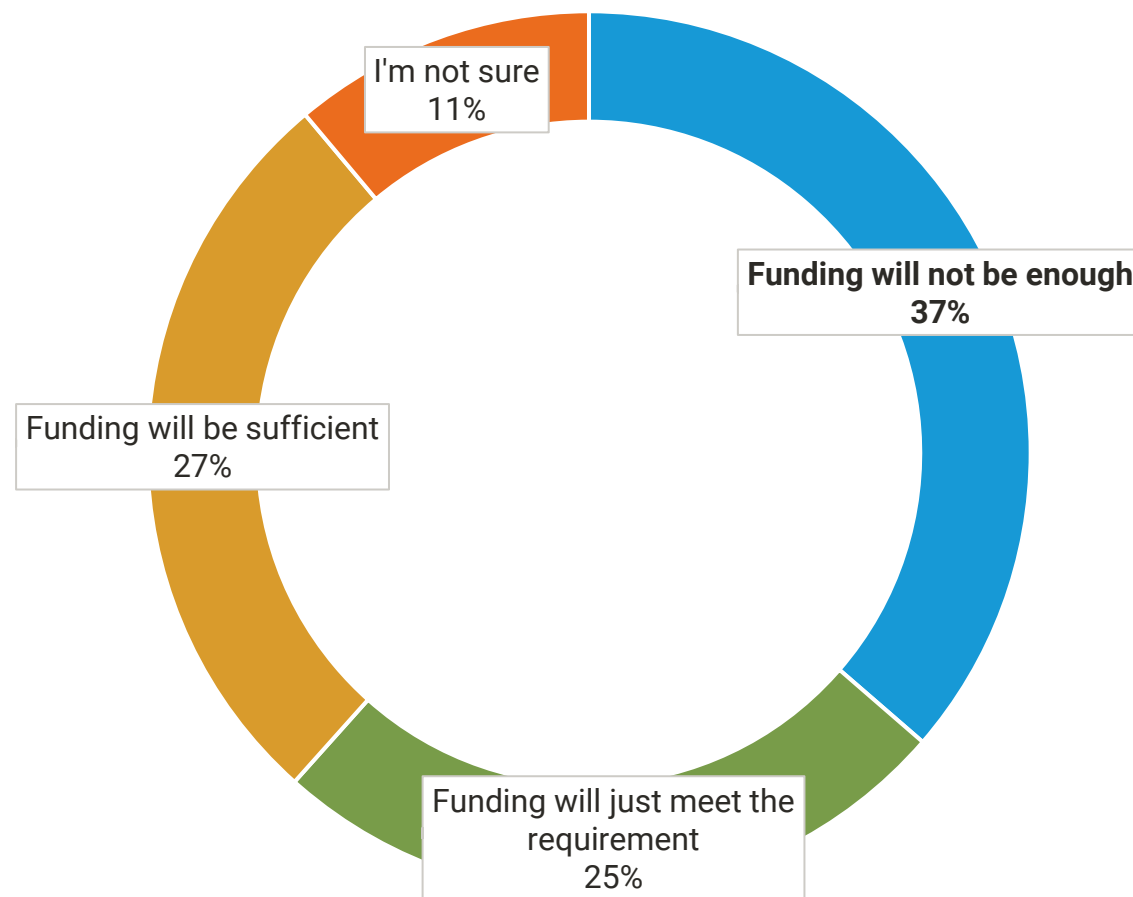
Q28 - Have you experienced resistance to technology adoption from your staff? (Select one)



Base=99

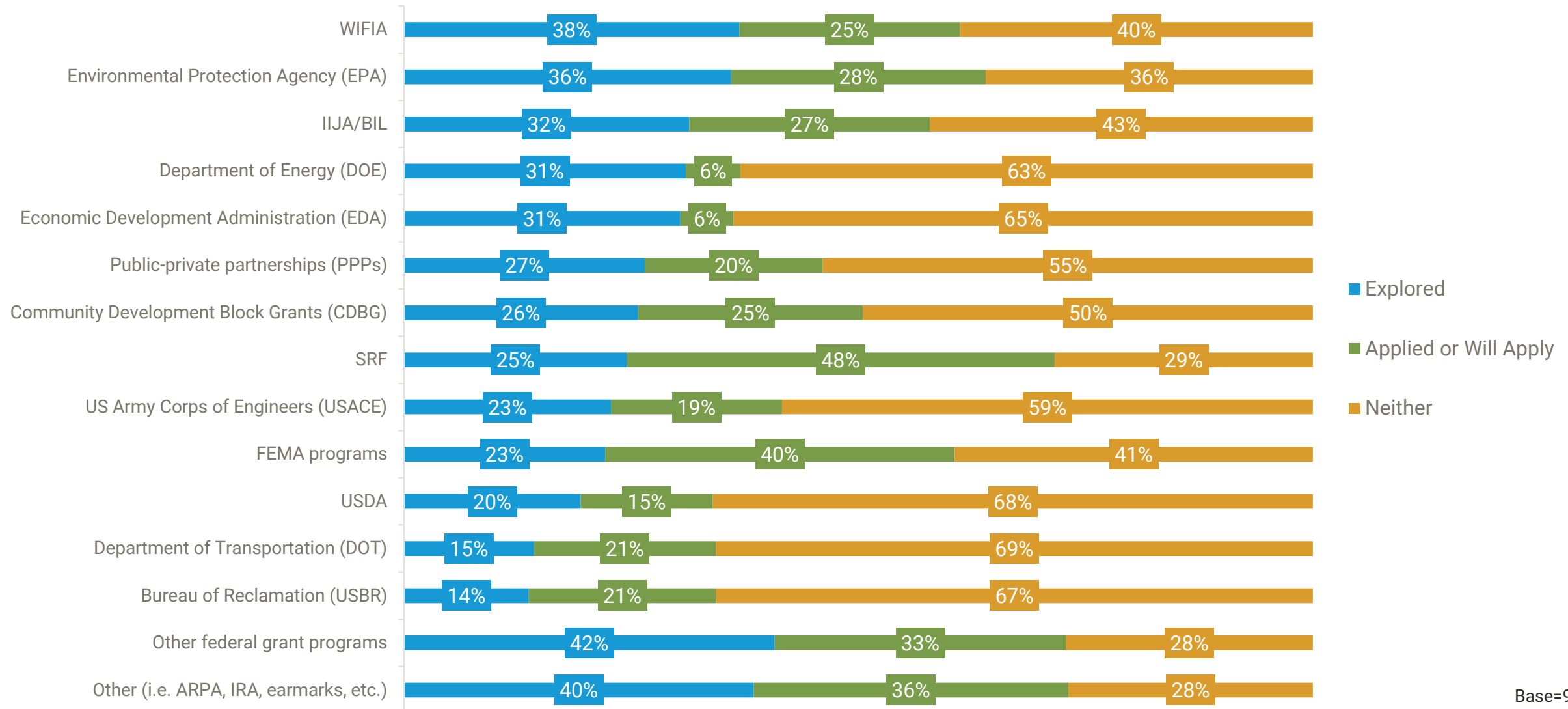
Funding Alternatives

Q30 - How sufficient is funding in general for capital infrastructure projects for your organization in the long-term (5-10 years)? (Select one)



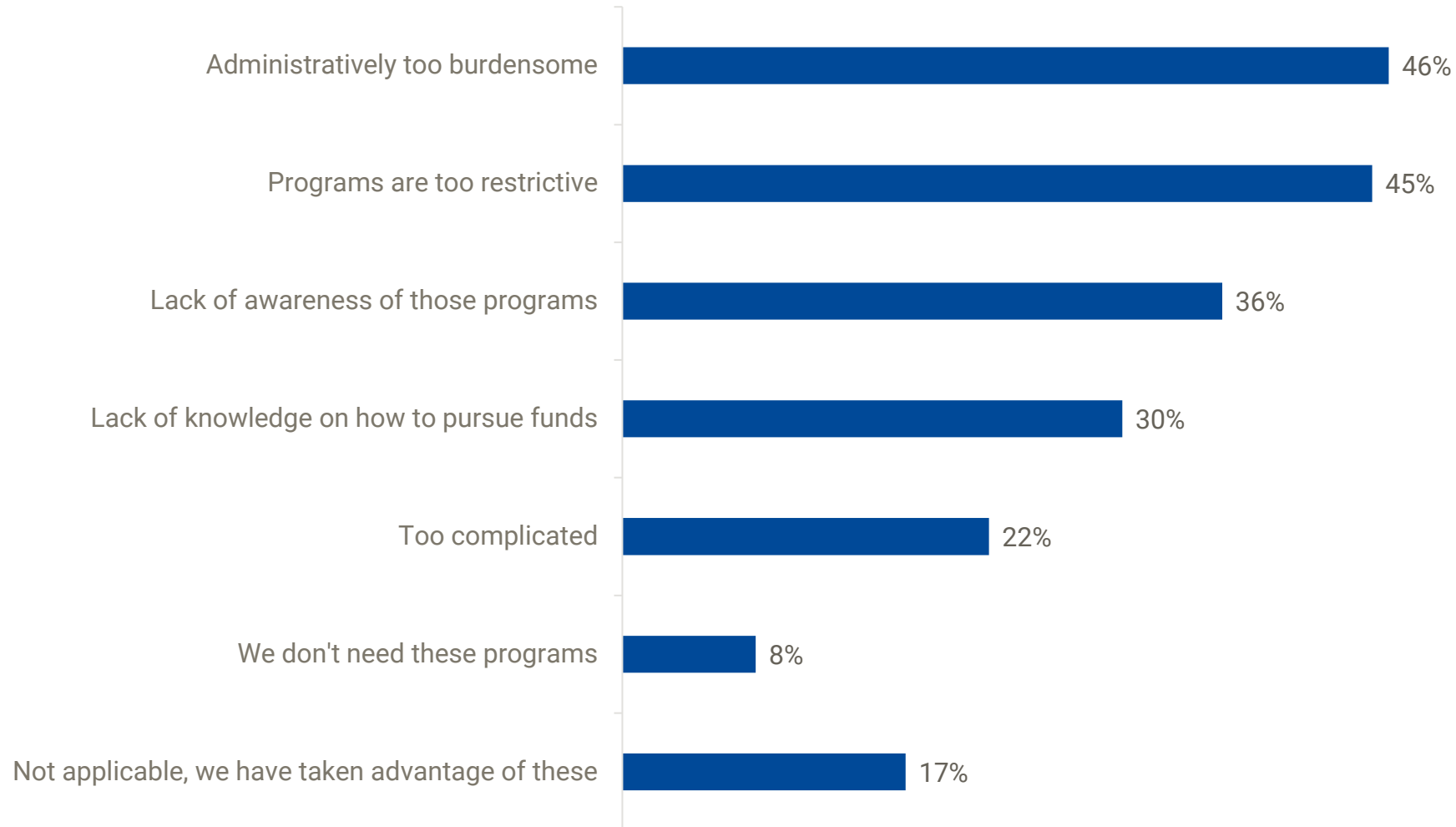
Base=99

Q32 - Which of the following sources has your organization looked into for capital project funding? Have you applied for any such funds for capital projects? (Select all that apply for each source)



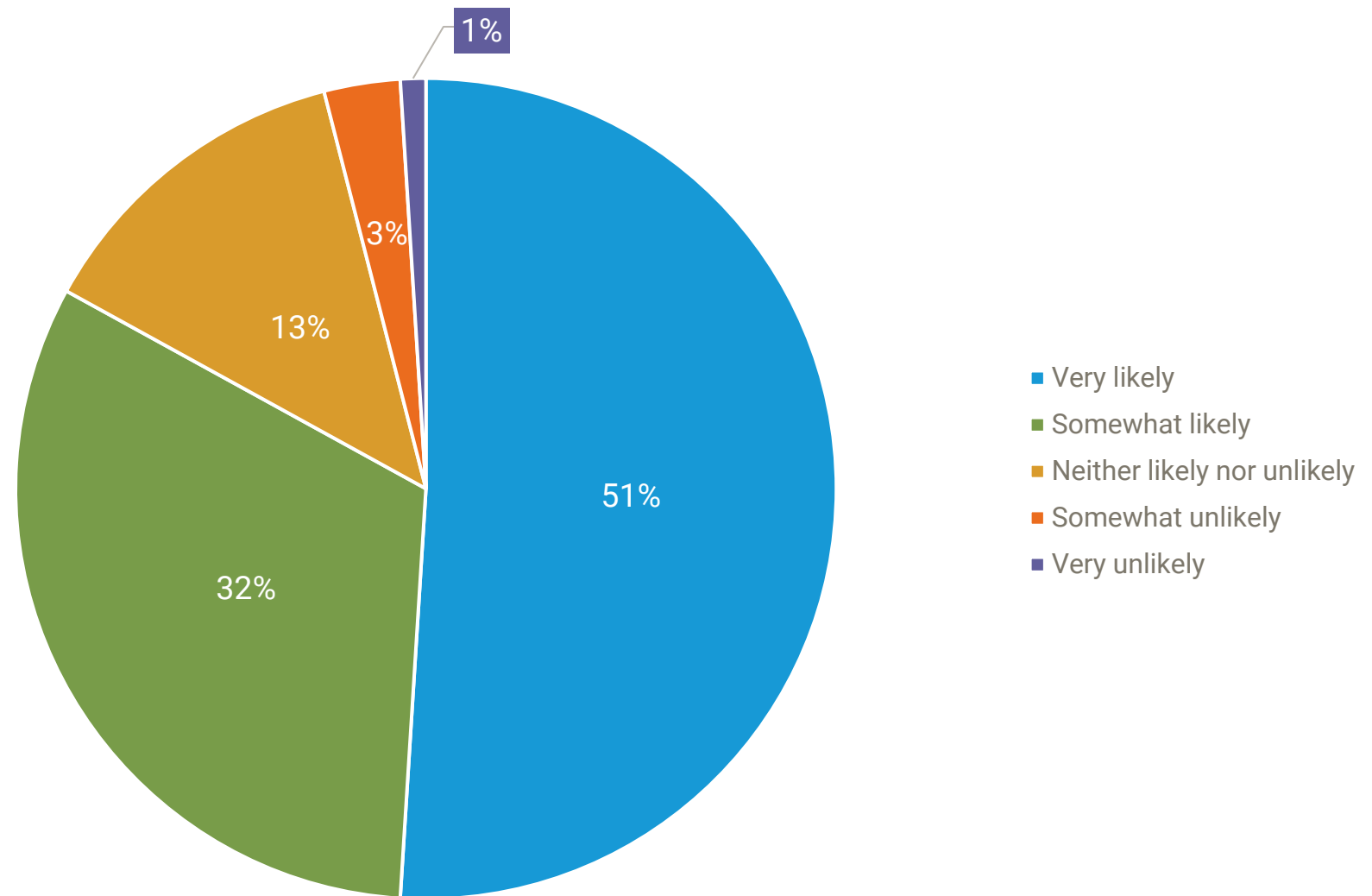
Base=96

Q33 - What are the main reasons why your organization has not taken advantage of some of the above programs? (Select all that apply)



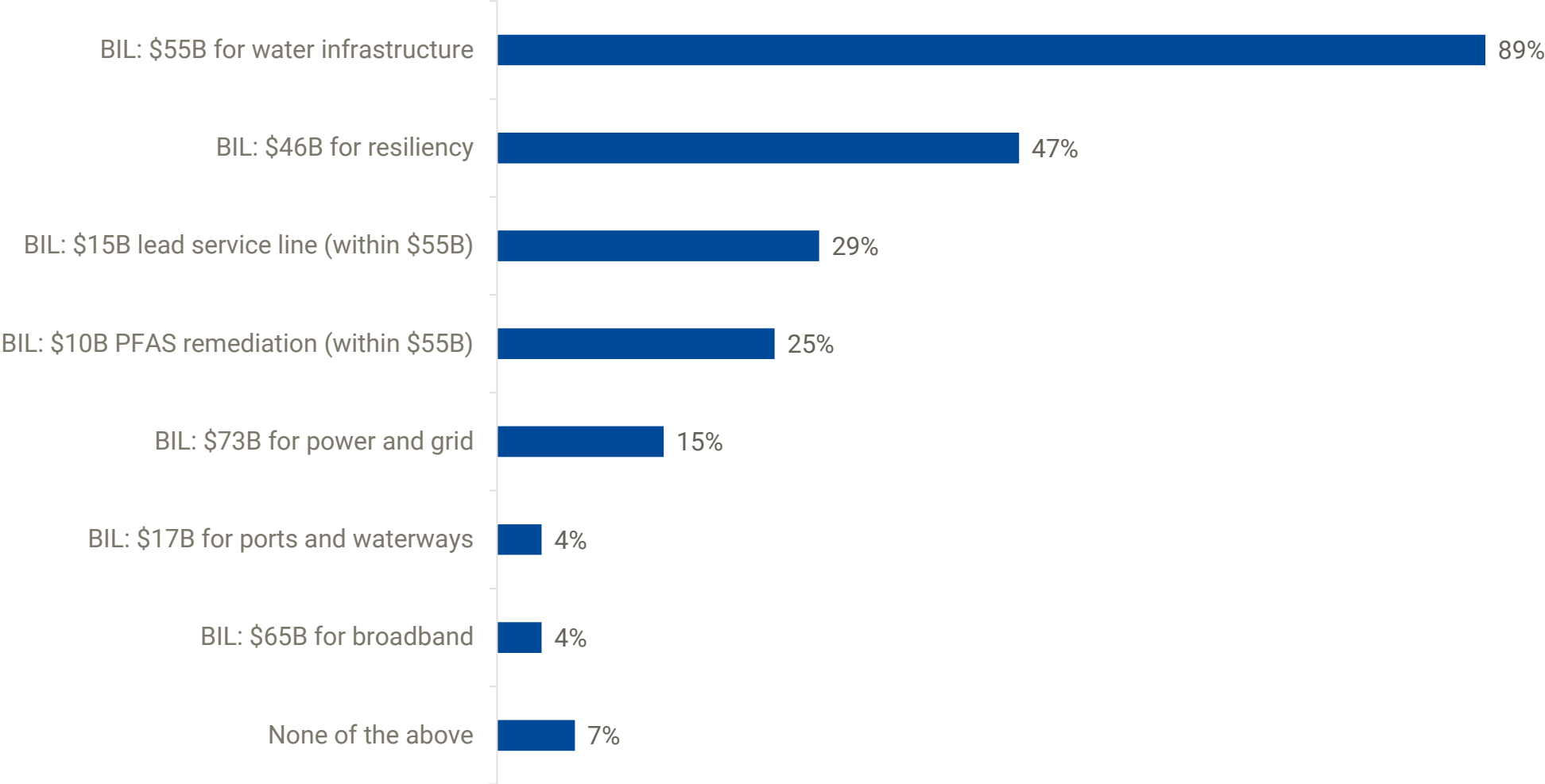
Base=96

Q34 - How likely are you to make use of the available funding programs? (Select one)



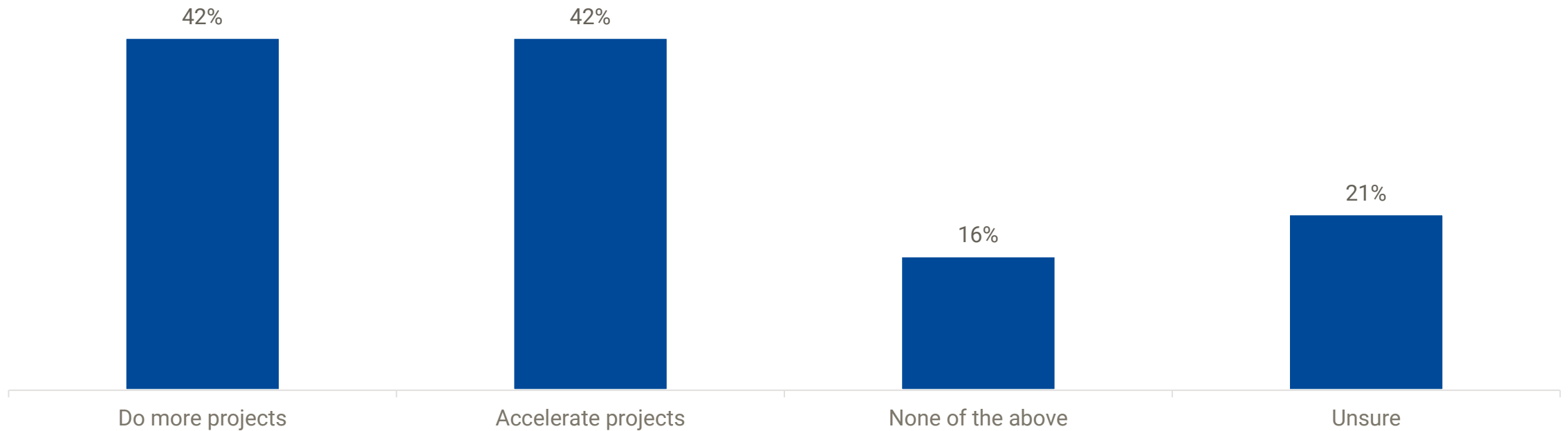
Base=99

Q35 - Which of the following funding sources, if any, will you pursue? (Select all that apply)



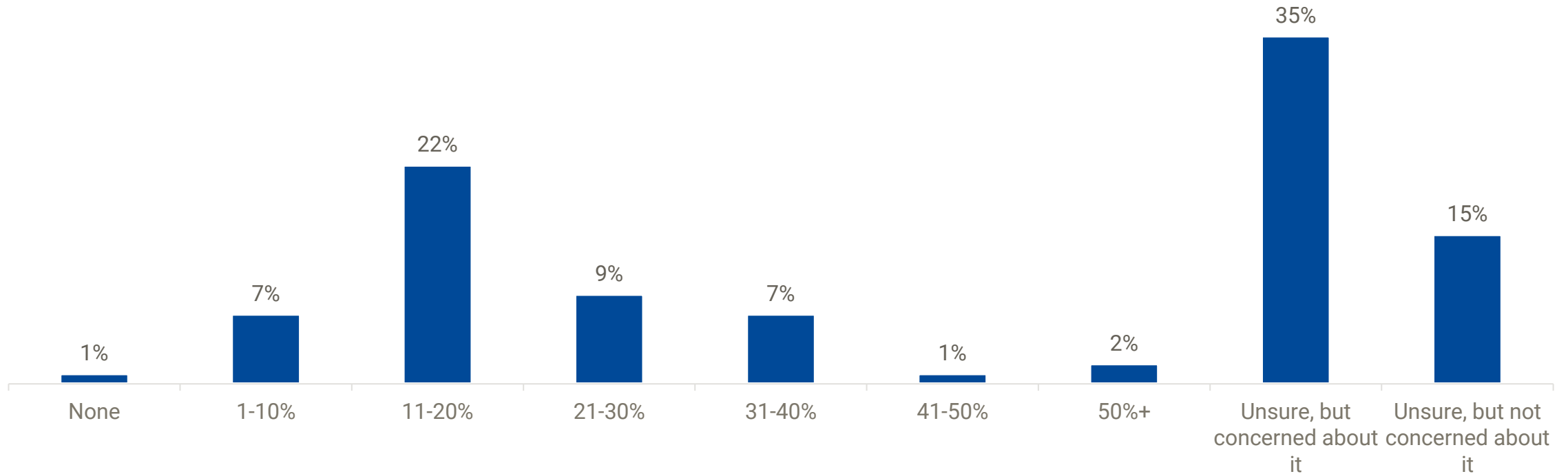
Base=55

Q36 - Do you anticipate that the new funding sources (BIL, etc.) will allow you to...?
(Select all that apply)



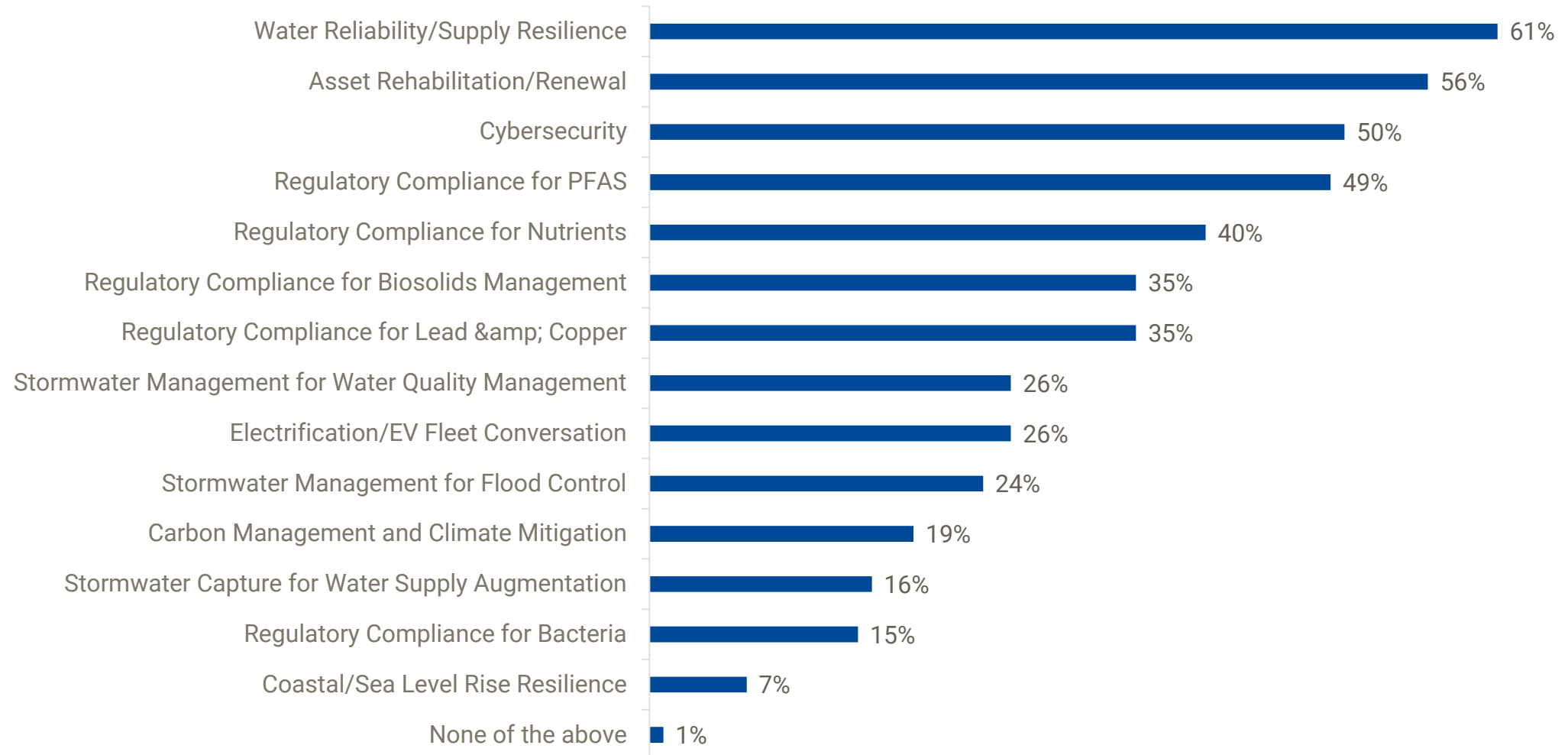
Base=96

Q37 - How much do you anticipate the 'Buy America, Build America Act (BABAA)' will result in increased costs for your project? (Select one)



Base=96

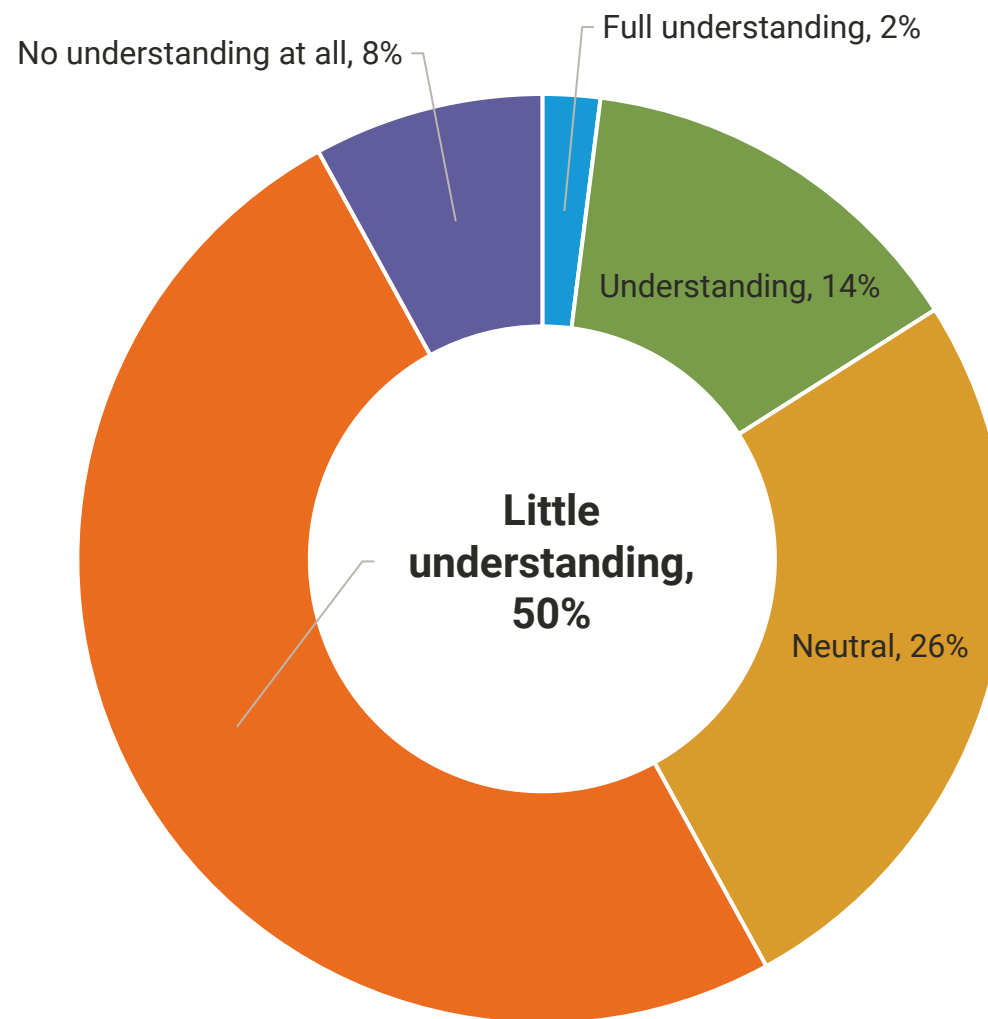
Q38 - Which of the following areas do you see as major investments for your utility/municipality over the next decade? (Select all that apply)



Base=96

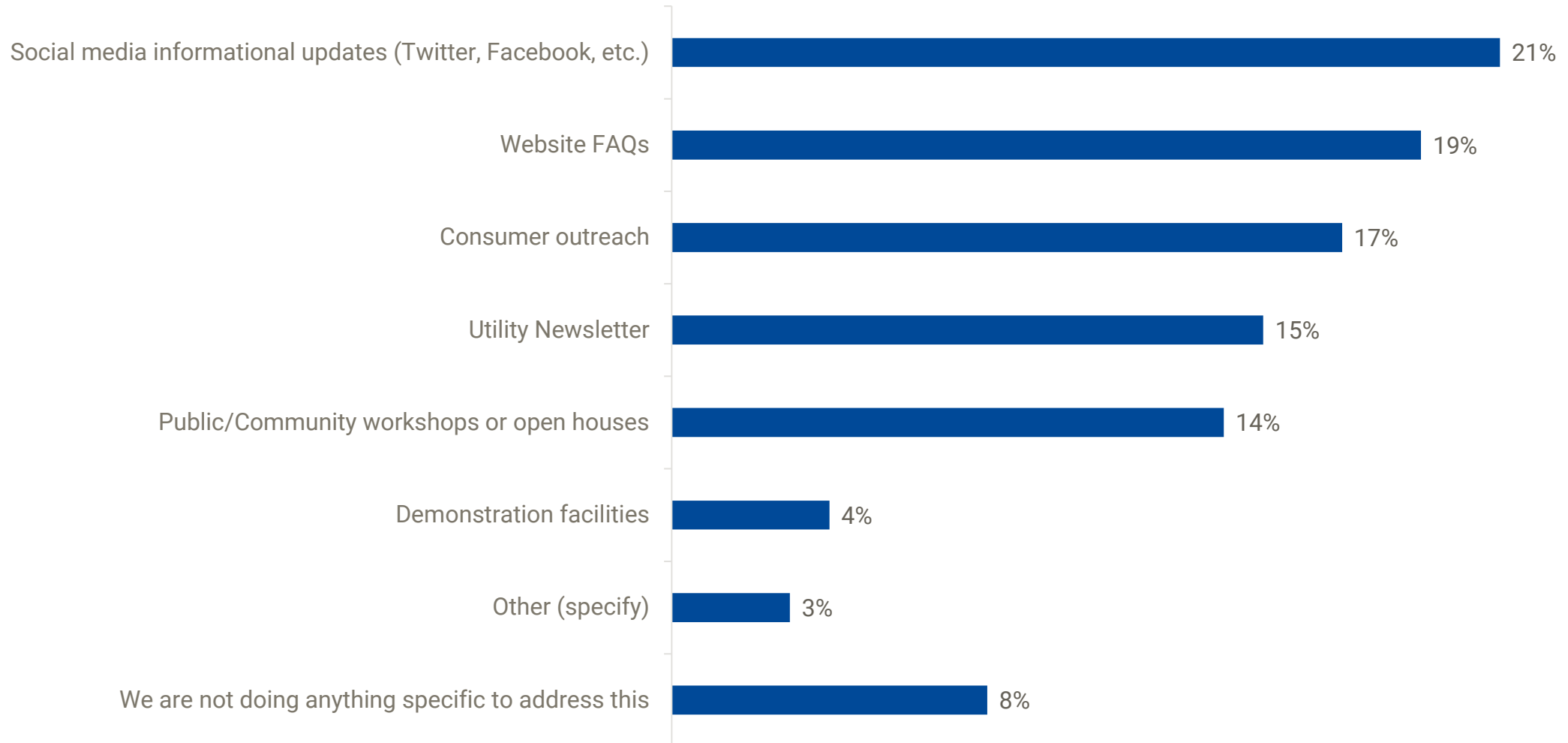
Rates

Q40 - How well do consumers understand the gap between the cost of producing safe water and the current rates being paid by consumers? (Select one)



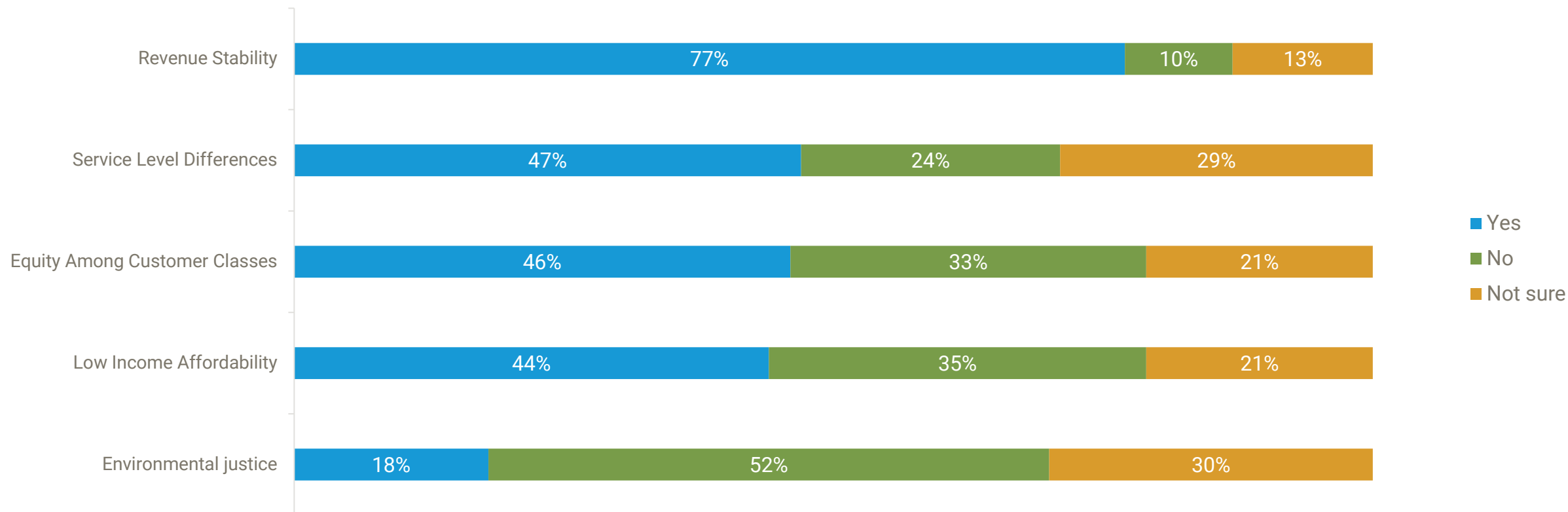
Base=96

Q41 - What, if anything, are you doing to address consumers' understanding of this gap?
(Select all that apply)



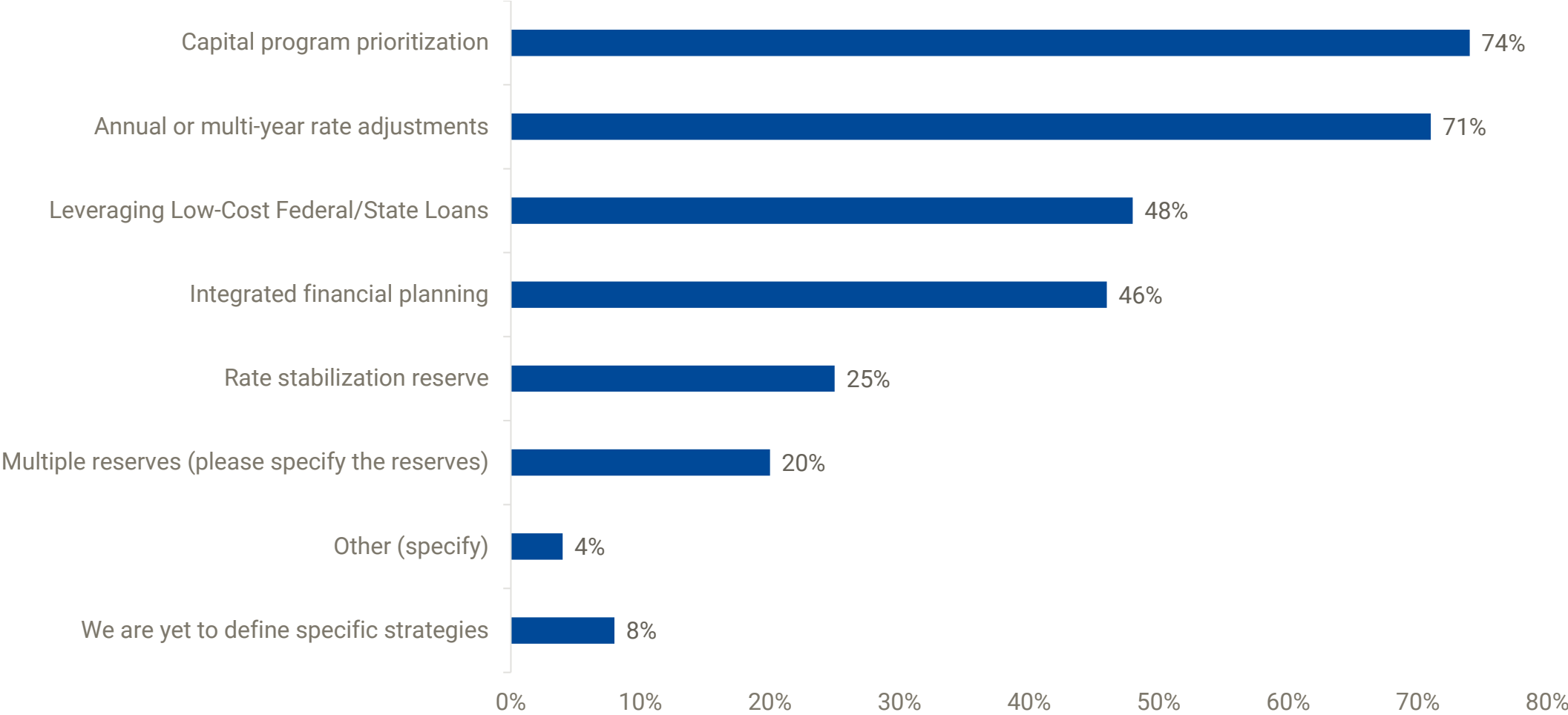
Base=94

Q42 - Does your current rate structure help address one or more of the following? (Select one for each)



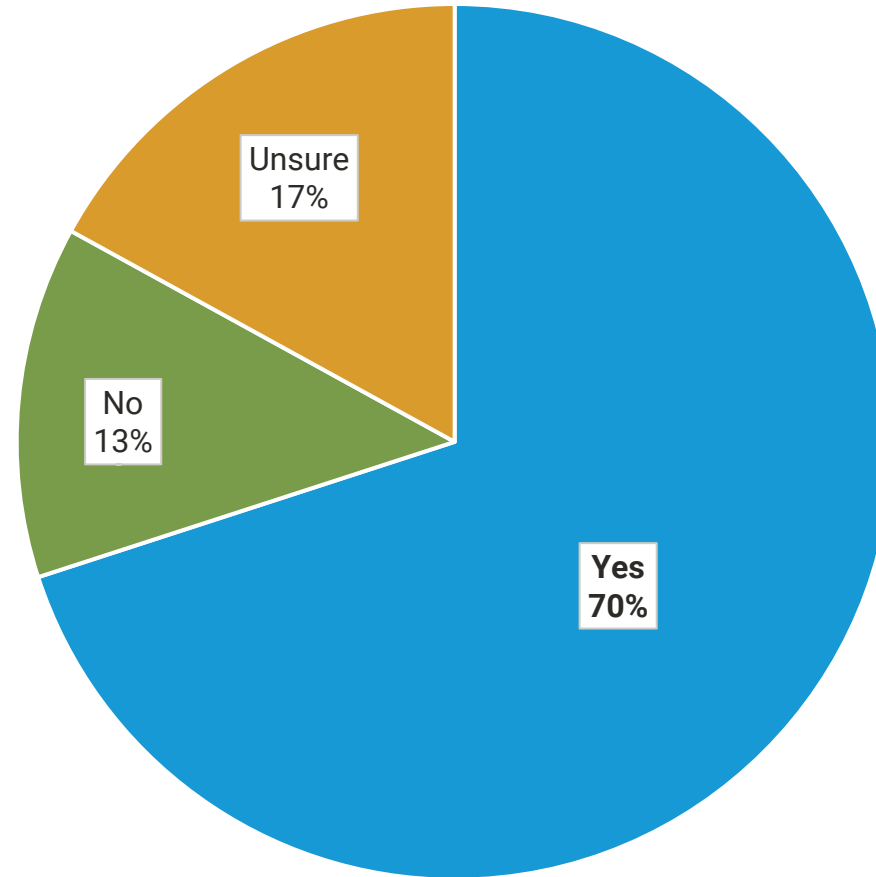
Base=96

Q43 - What are your current strategies for addressing financial resilience? (Select all the apply)



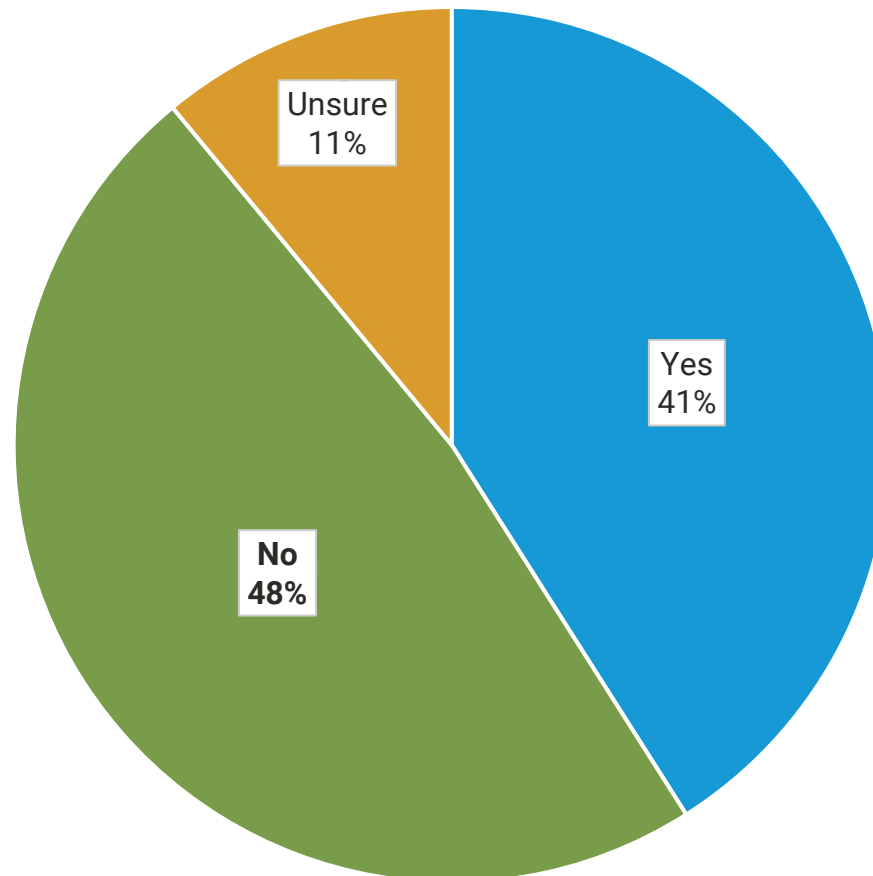
Base=96

Q44 - Do you currently have adequate reserve levels? (Select one)



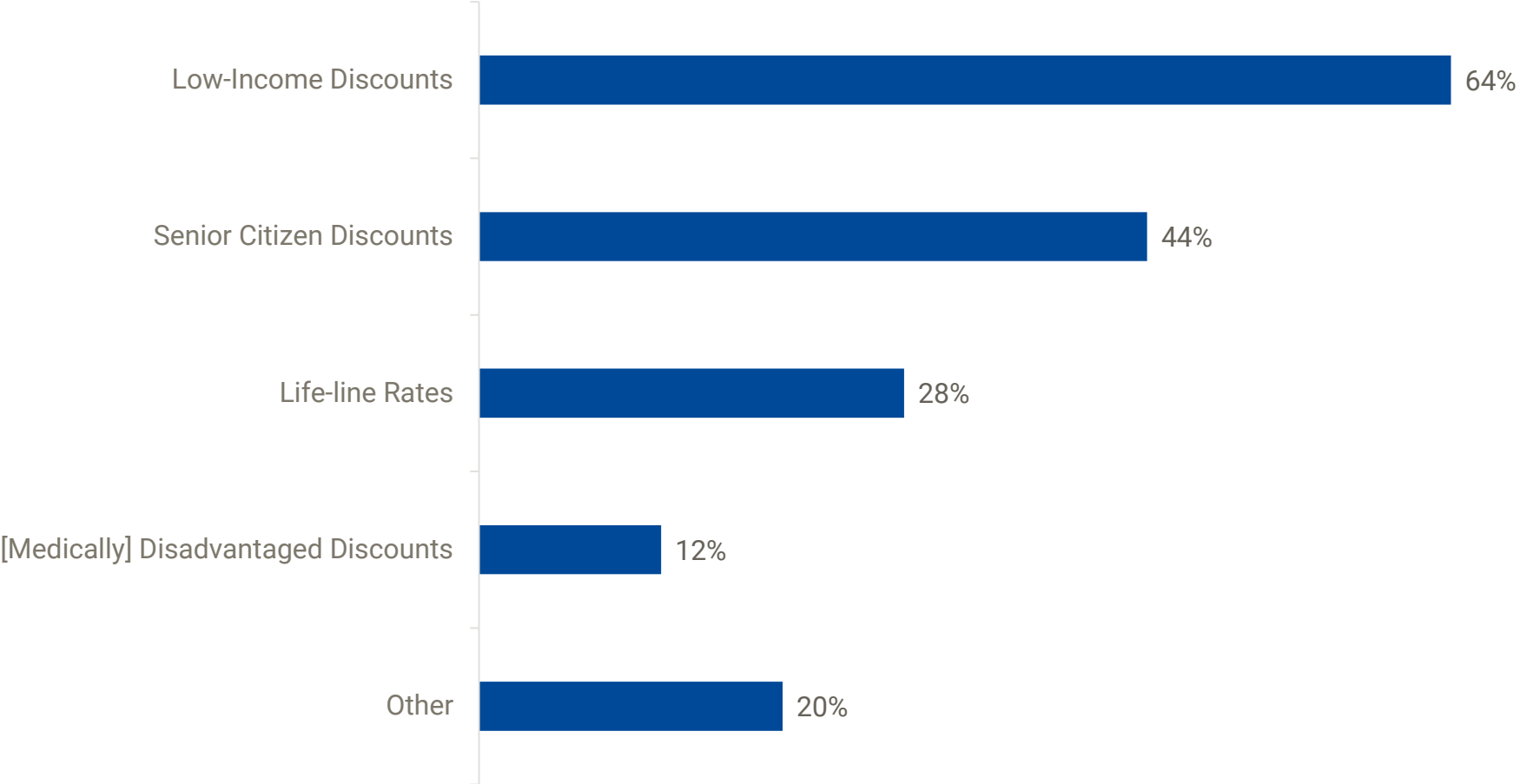
Base=96

Q45 - Does your organization have an affordability program for low-income customers?
(Select one)



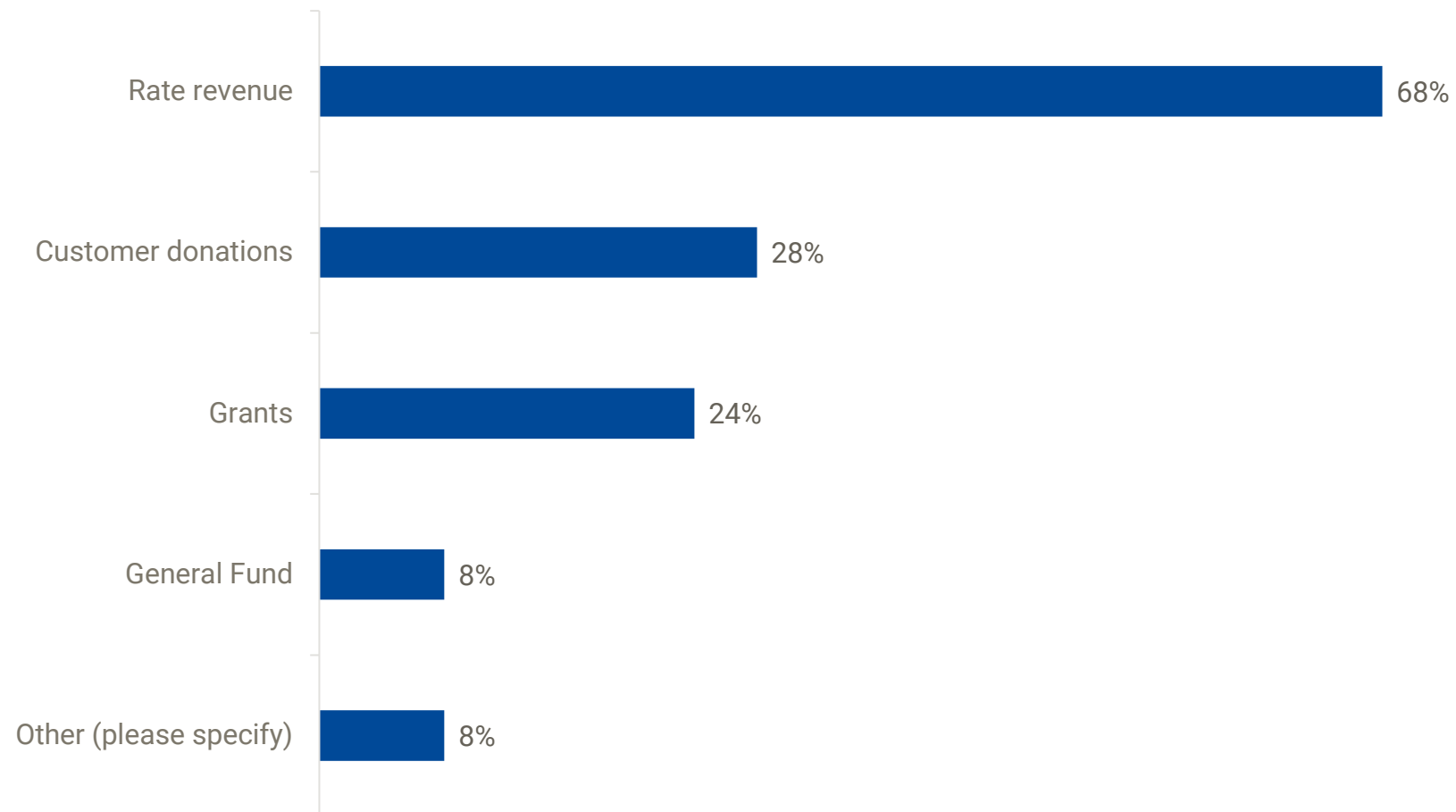
Base=63

Q46 - Please select all that apply for your organization



Base=25

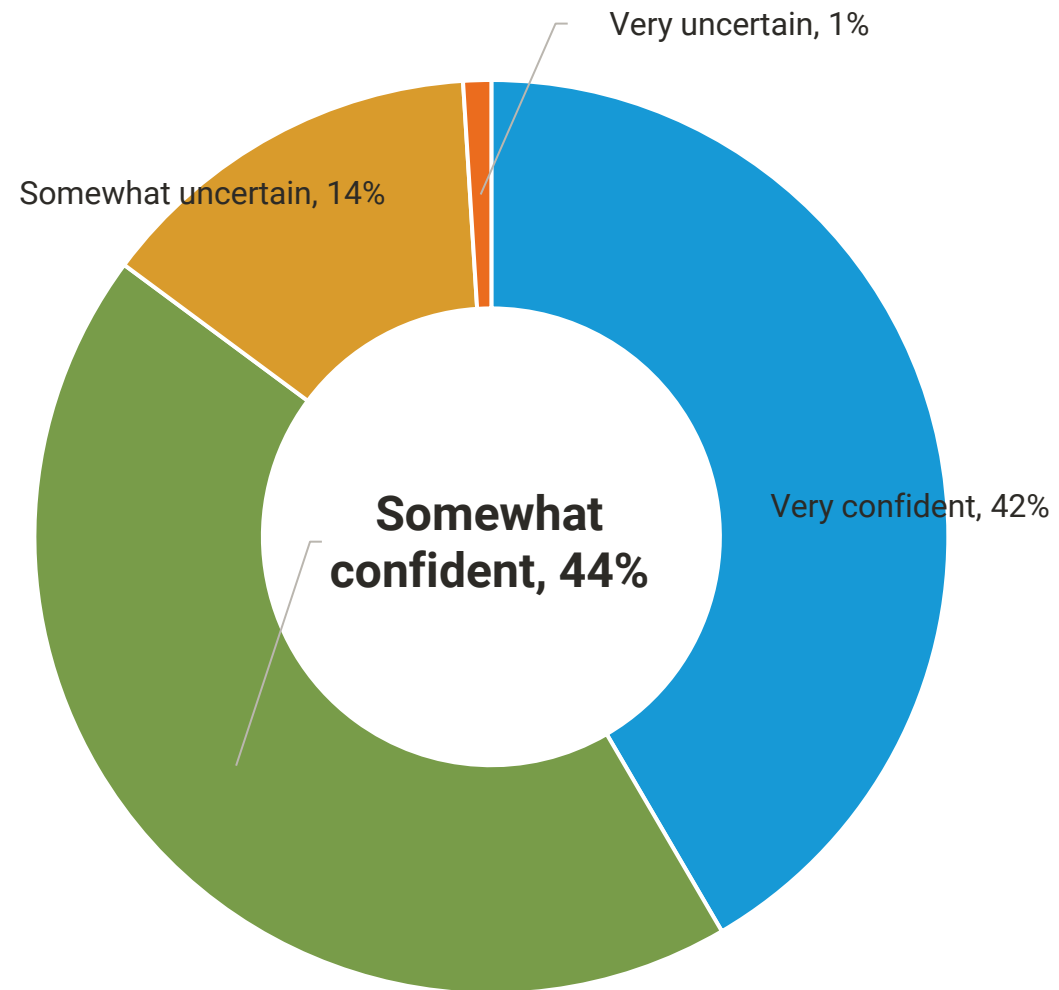
Q47 - What is the funding source for your affordability program (Select all that apply)



Base=25

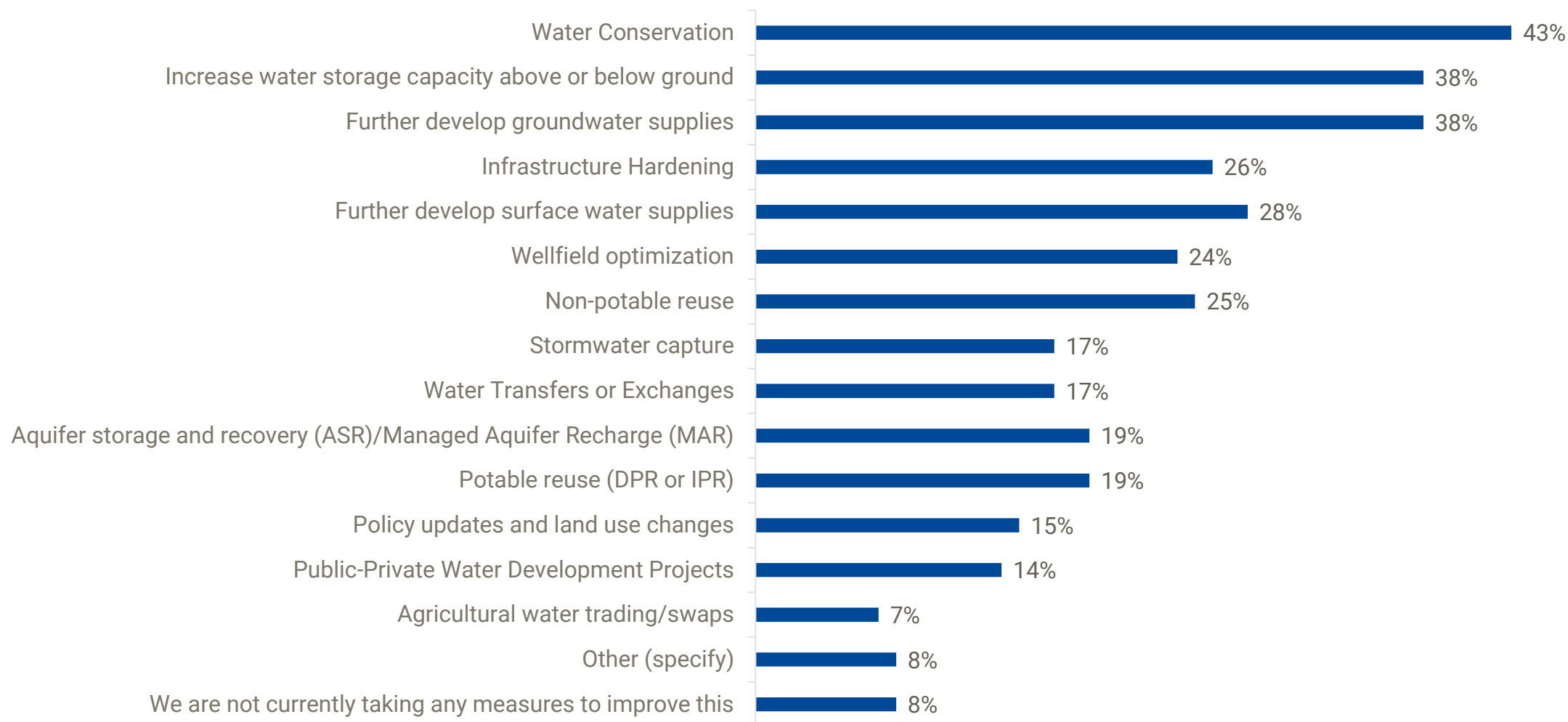
Water Supply

Q49 - How confident are you in the resiliency of your water supply? (Select one)



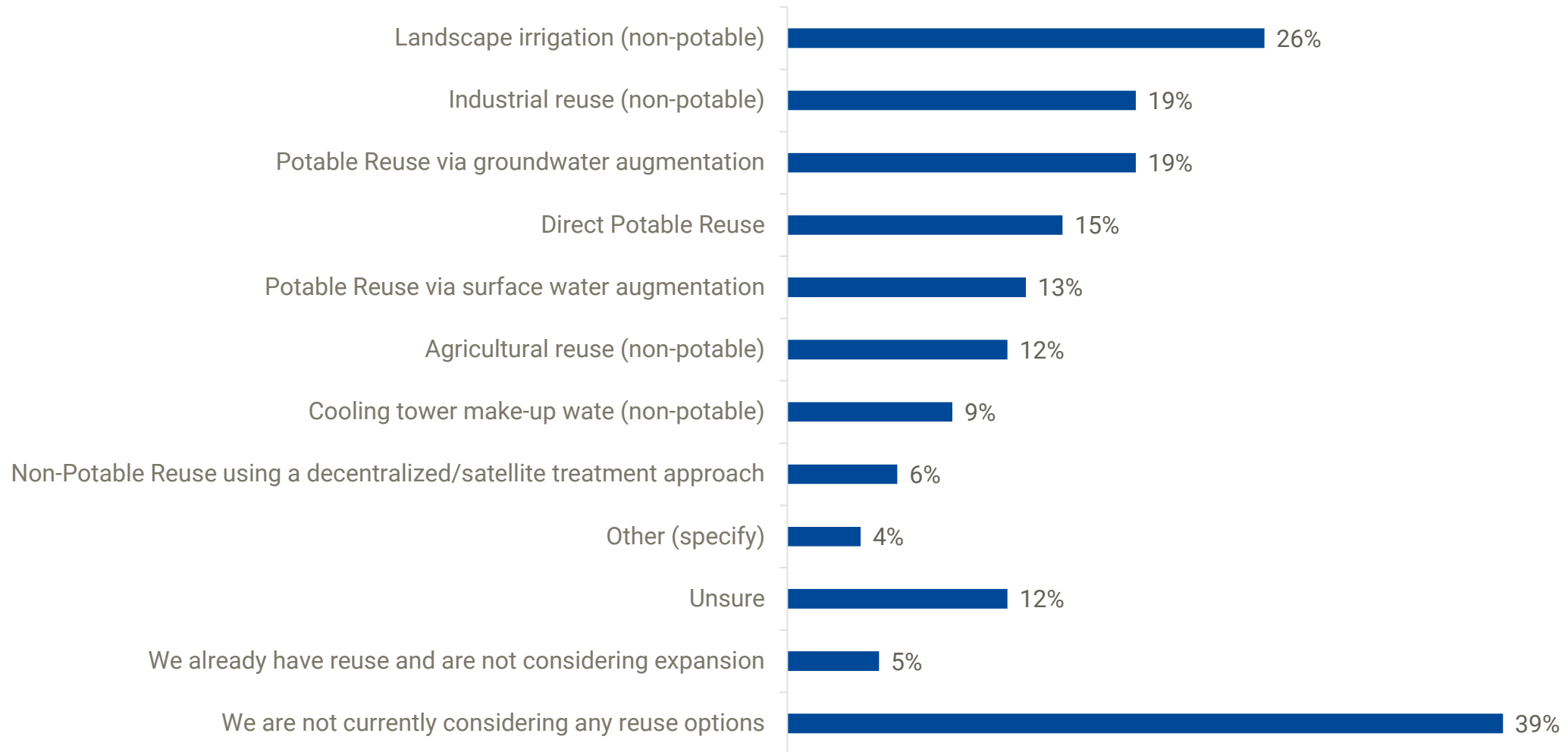
Base=101

Q50 - What actions are you taking/considering to improve the resiliency of your water supply? (Select all that apply)



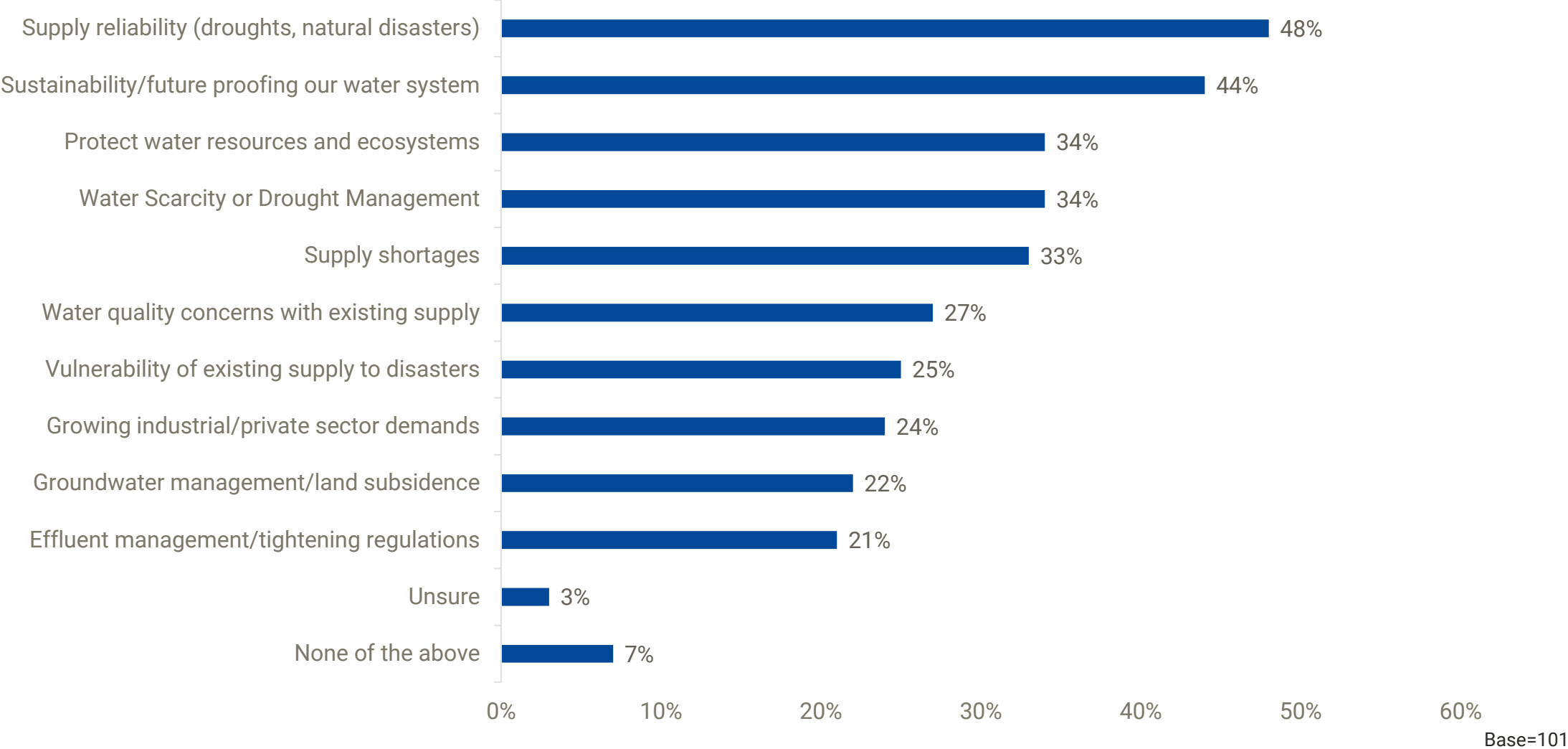
Base=101

Q51 - What reuse options, if any, are you considering? (Select all that apply)

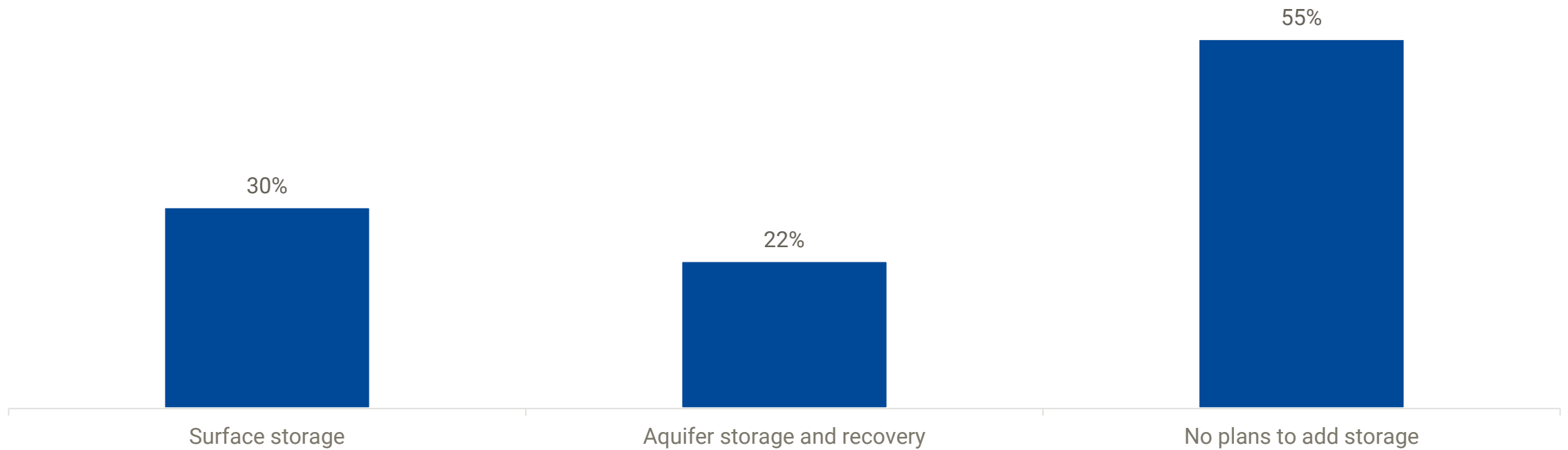


Base=101

Q52 - What are the drivers to consider alternative water supplies? (Select all that apply)

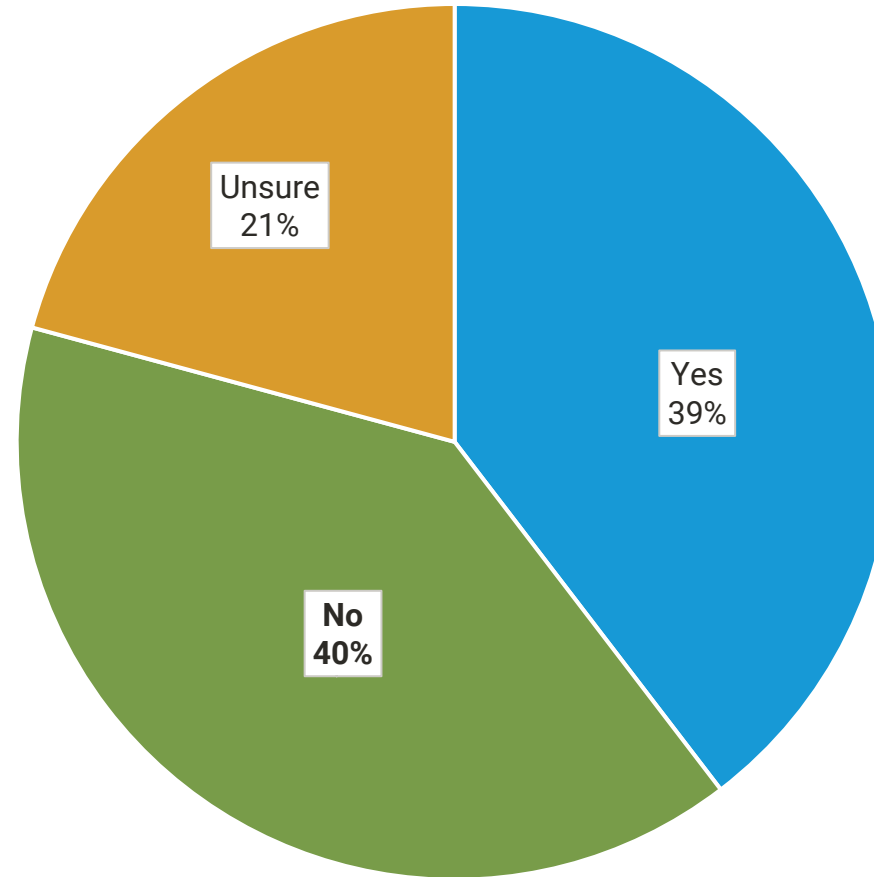


Q53 - What new large volume storage, if any, are you considering adding to your system?
(Select all that apply)



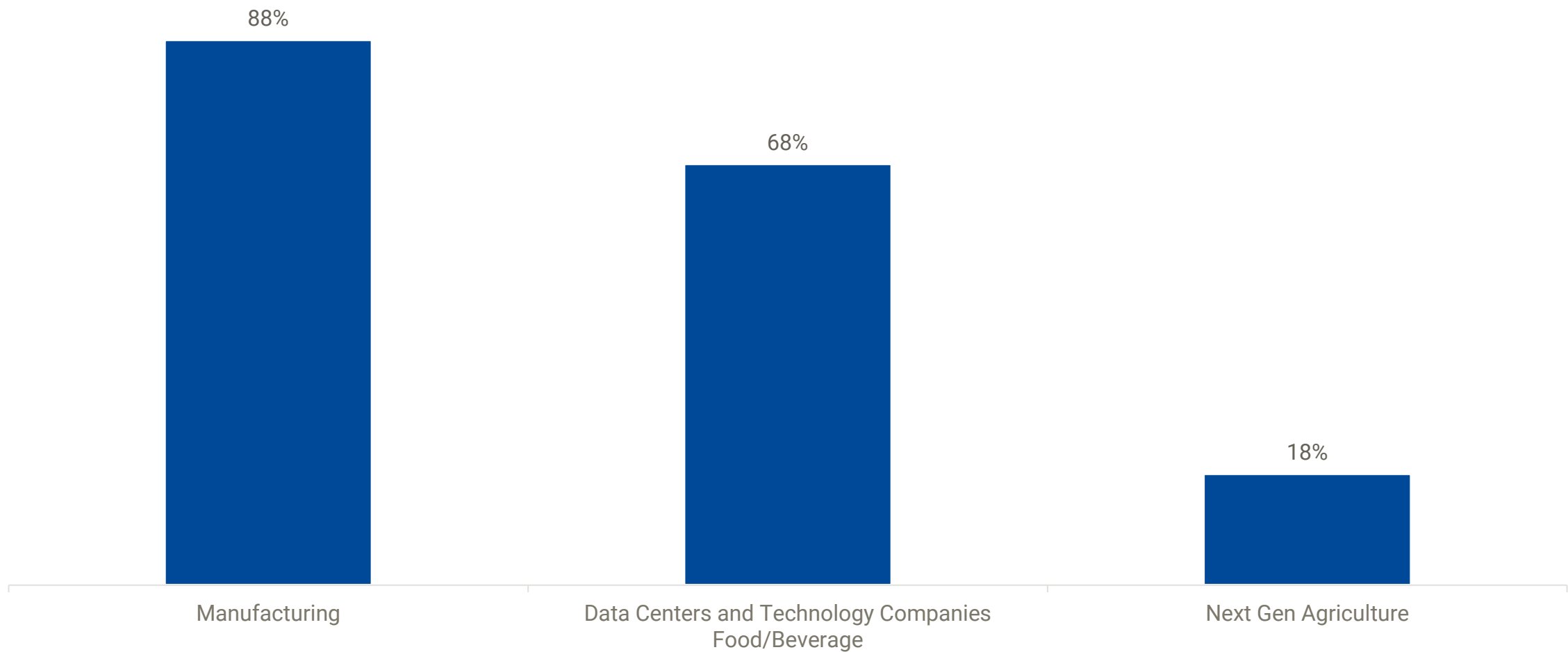
Base=101

Q54 - Are you seeing a renewed interest in large industry coming to your area? (Select one)



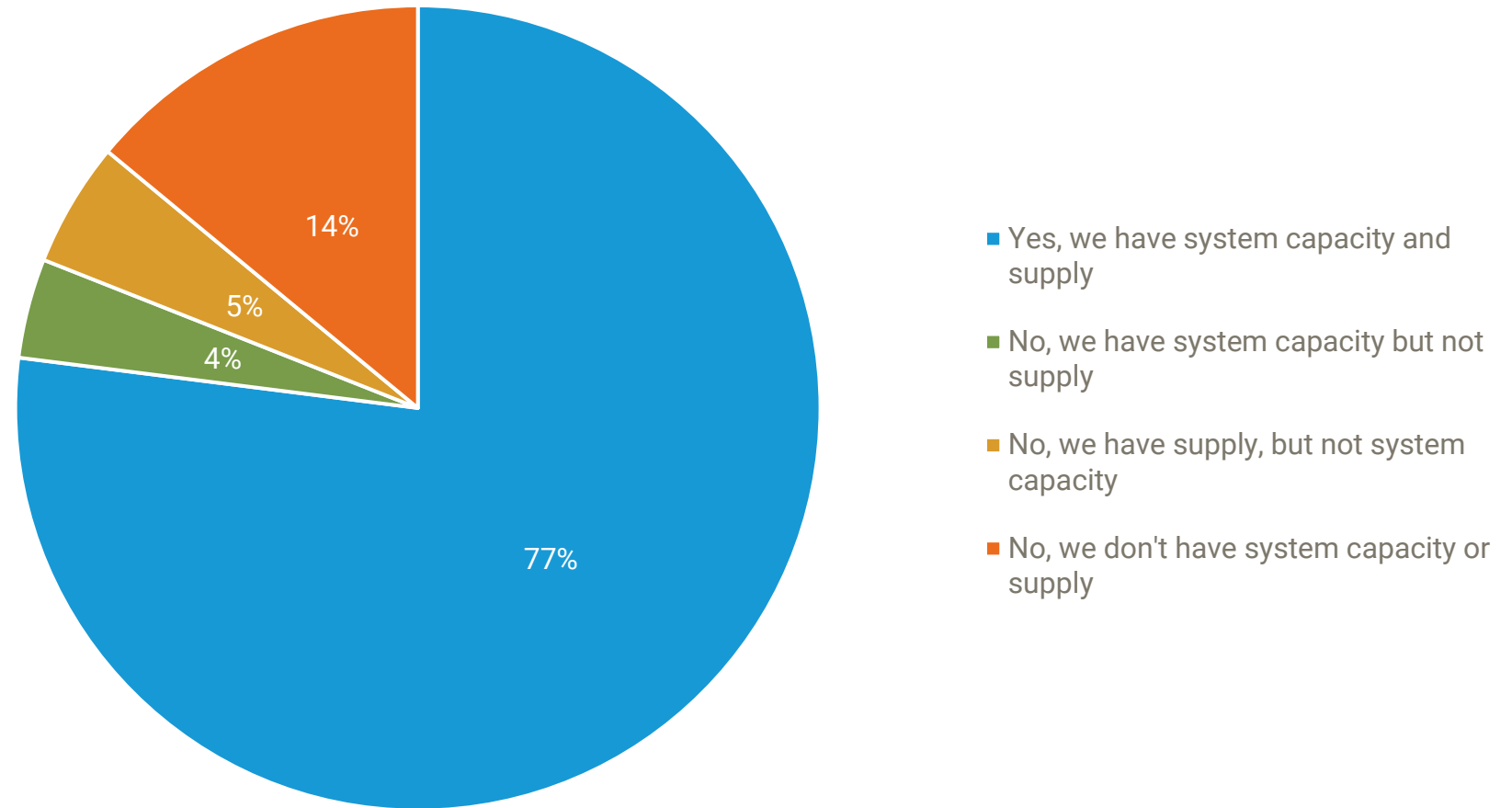
Base=101

Q55 - What type of industries? (Select all that apply)



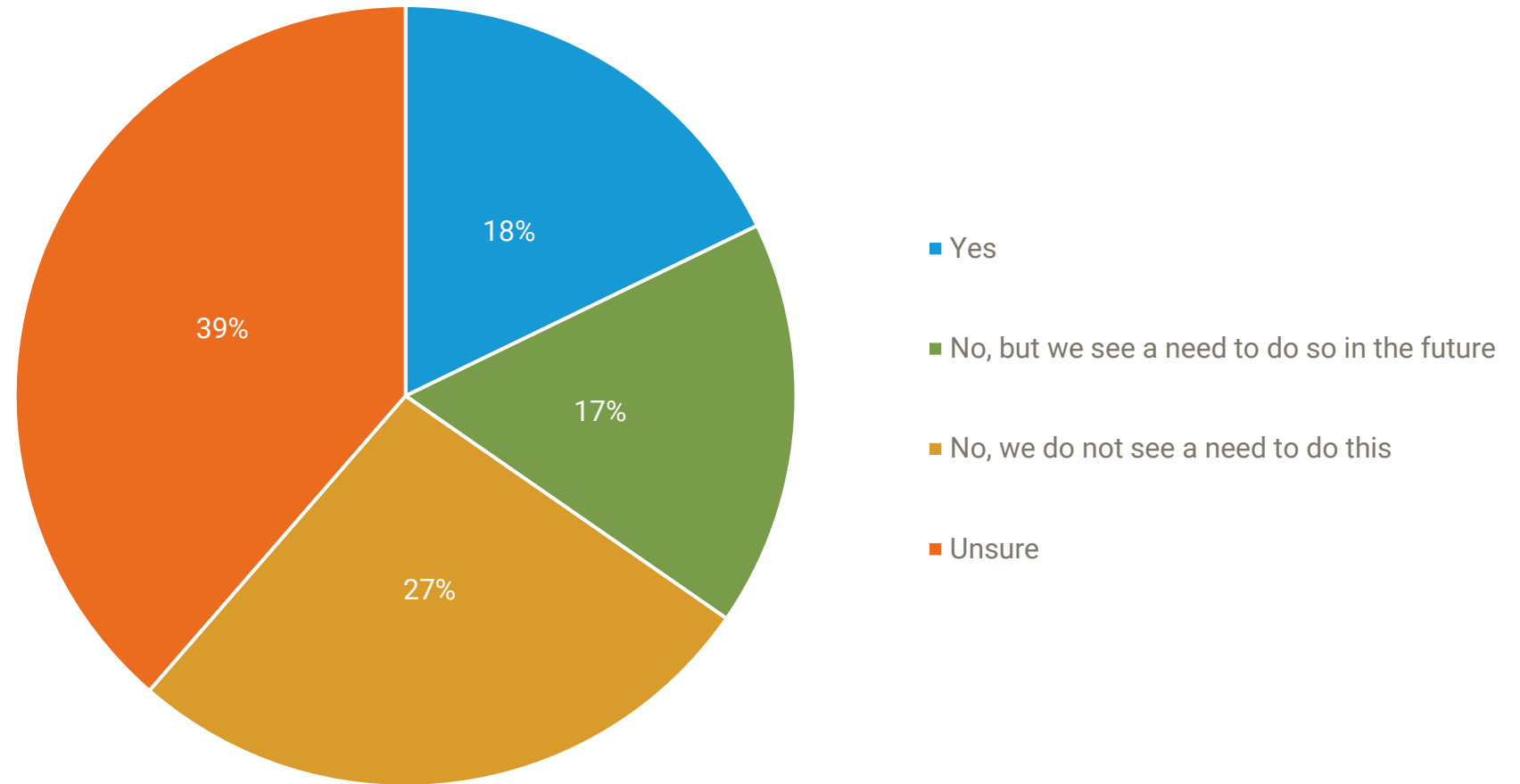
Base=40

Q56 - Would you be able to provide water supply to a large industry coming to your area?
(Select one)



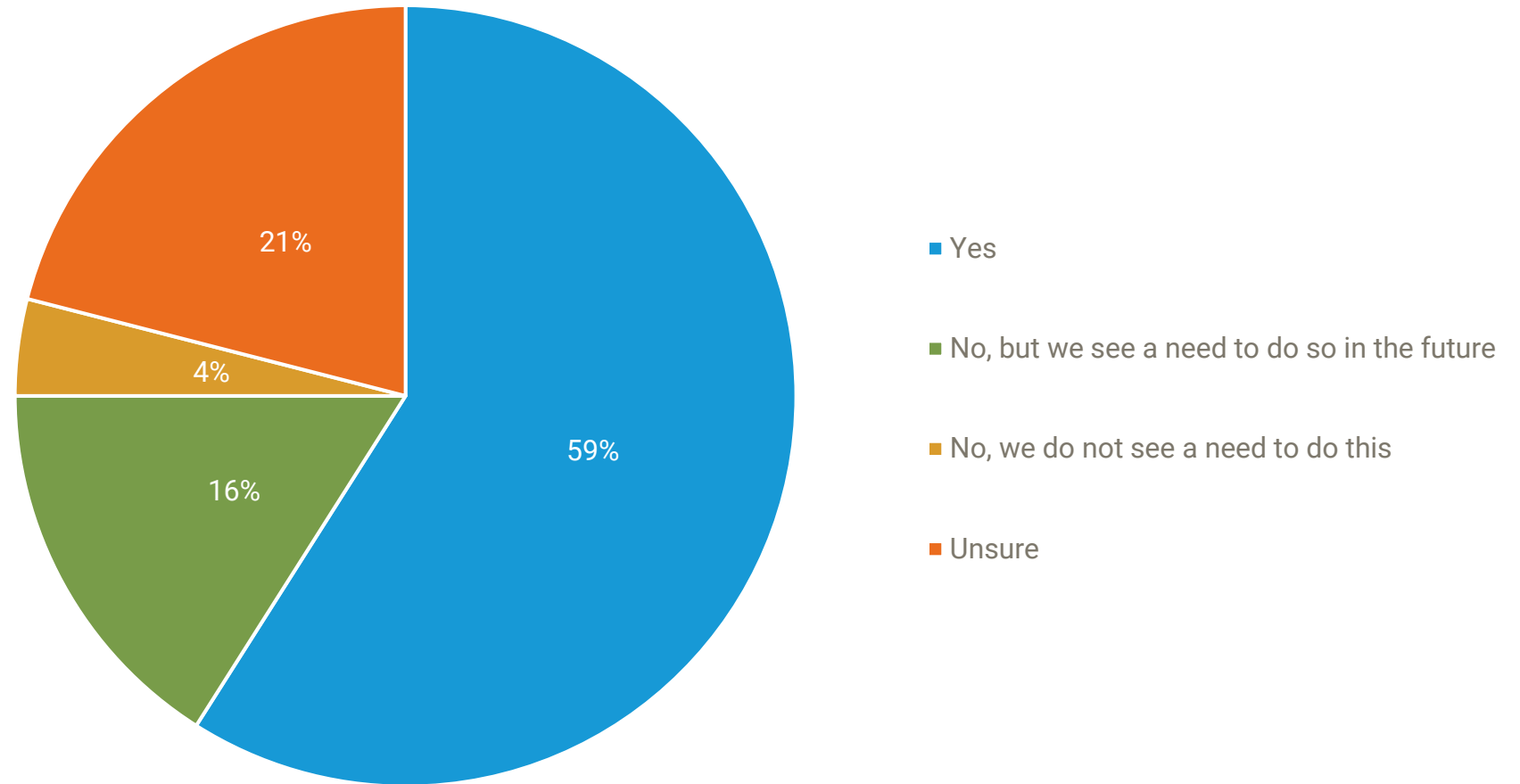
Base=101

Q57 - Have you developed a One Water/Integrated Water Supply plan? (Select one)



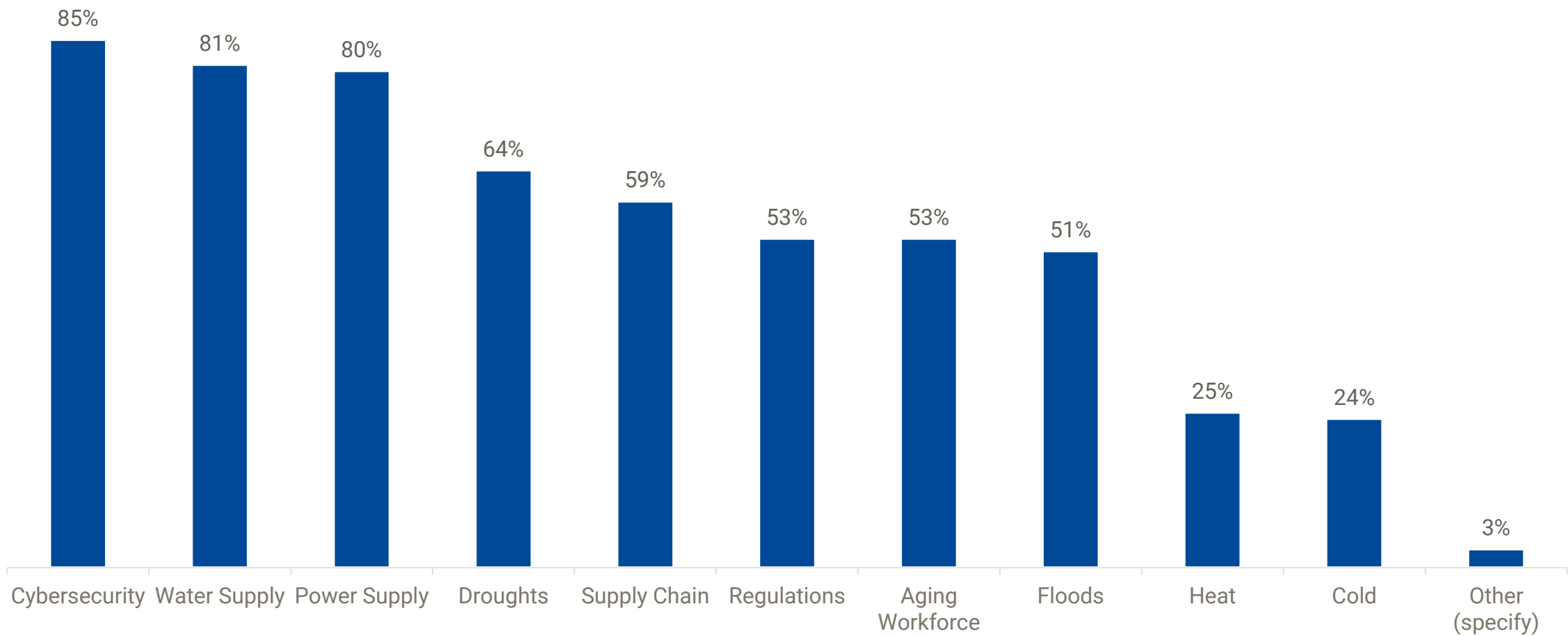
Base=101

Q58 - Have you performed a vulnerability study of your utility? (Select one)



Base=101

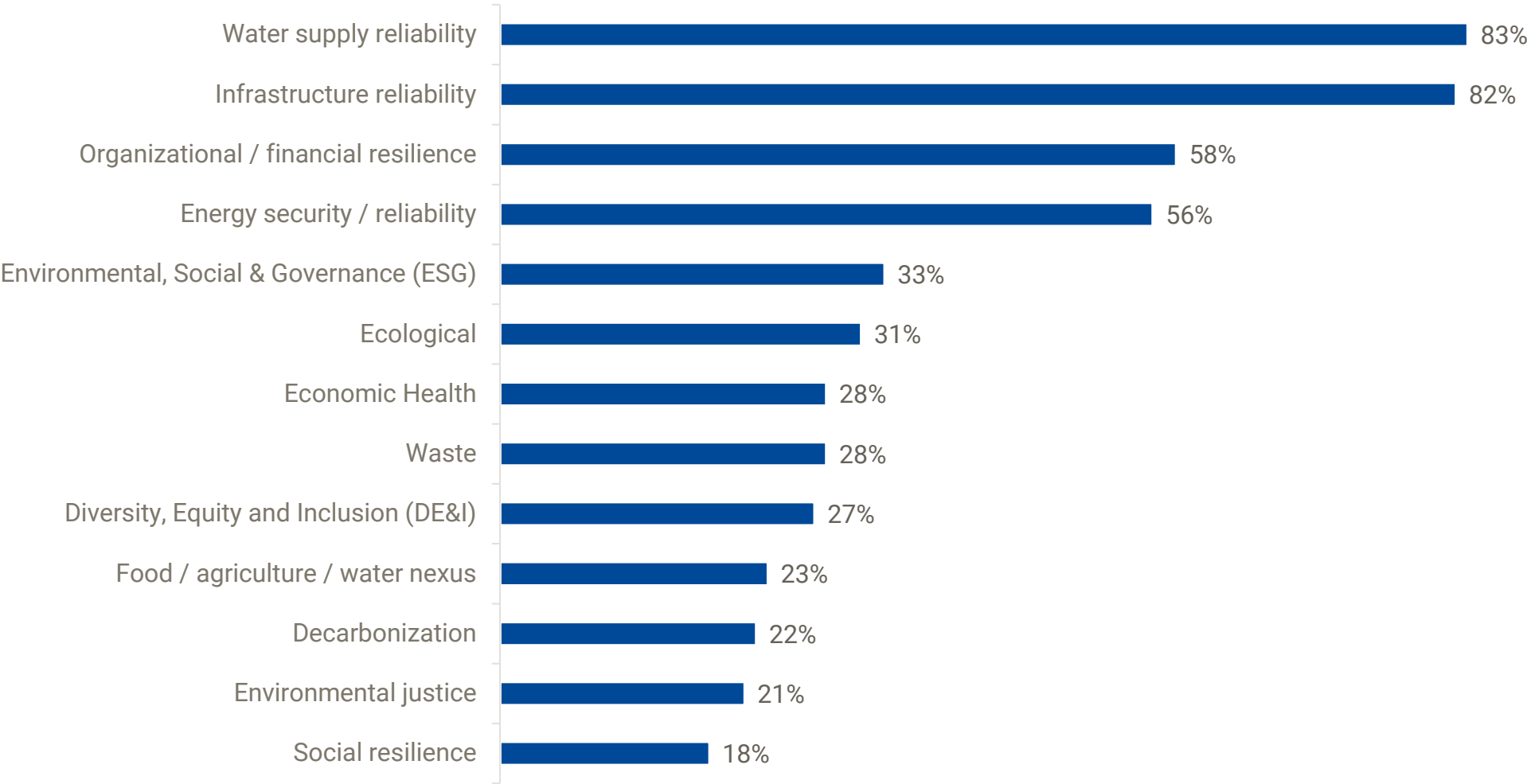
Q59 - What components were considered in your vulnerability study? (Select all that apply)



Base=59

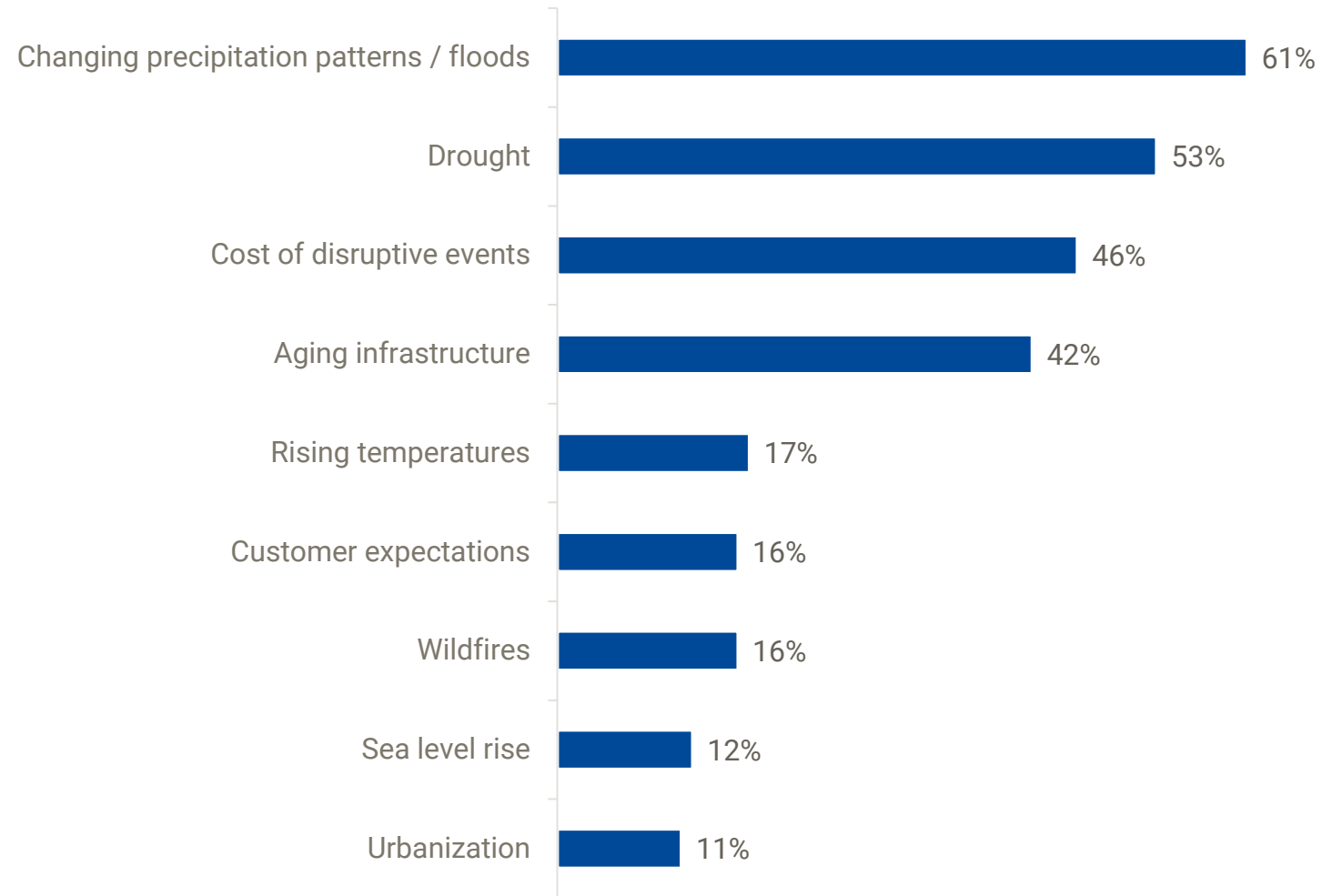
Climate Change

Q61 - What elements do you include in your definition of sustainability? (Select all that apply)



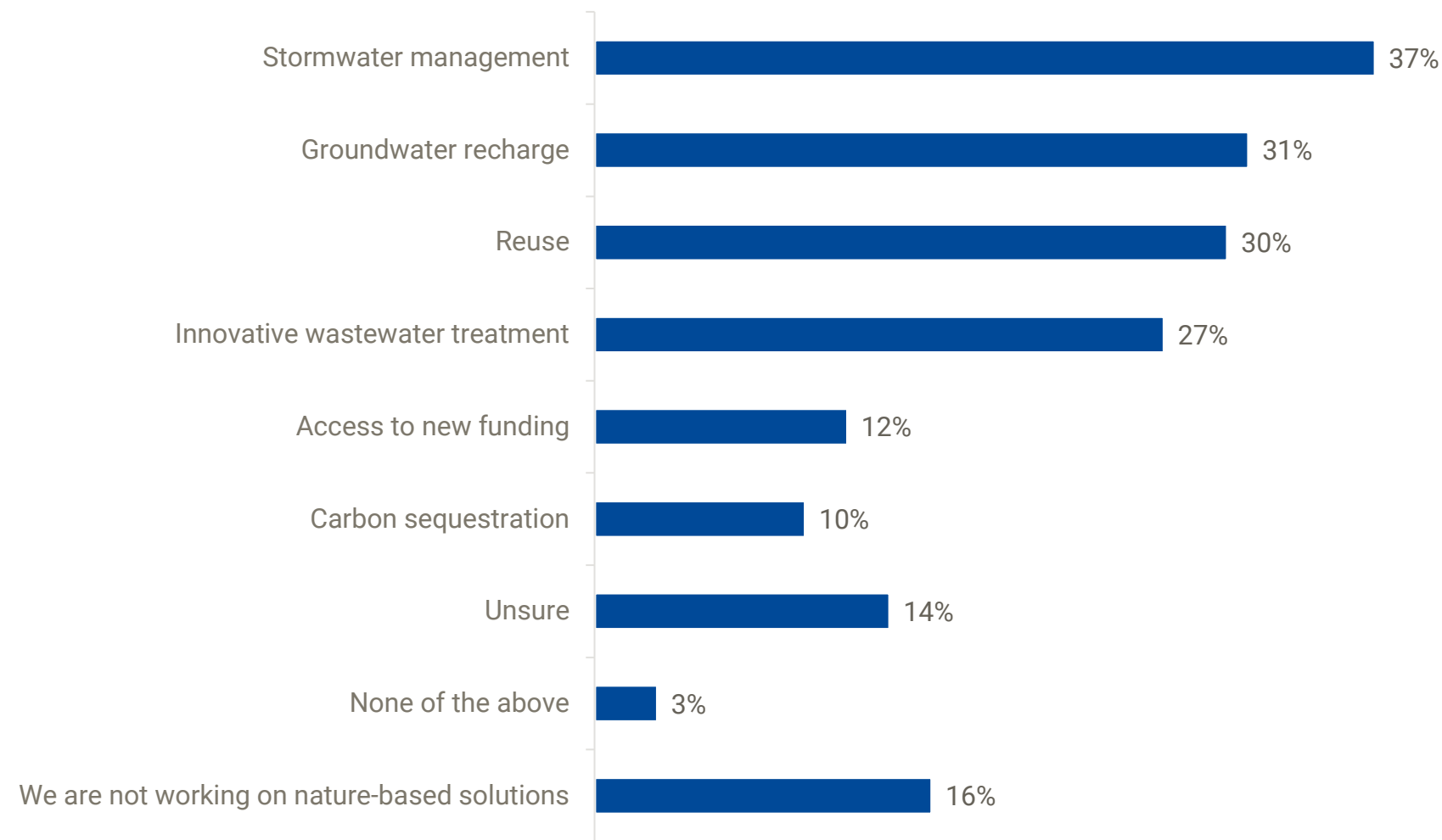
Base=99

Q62 - What are your top three concerns about the impact of climate change? (Select up to three)



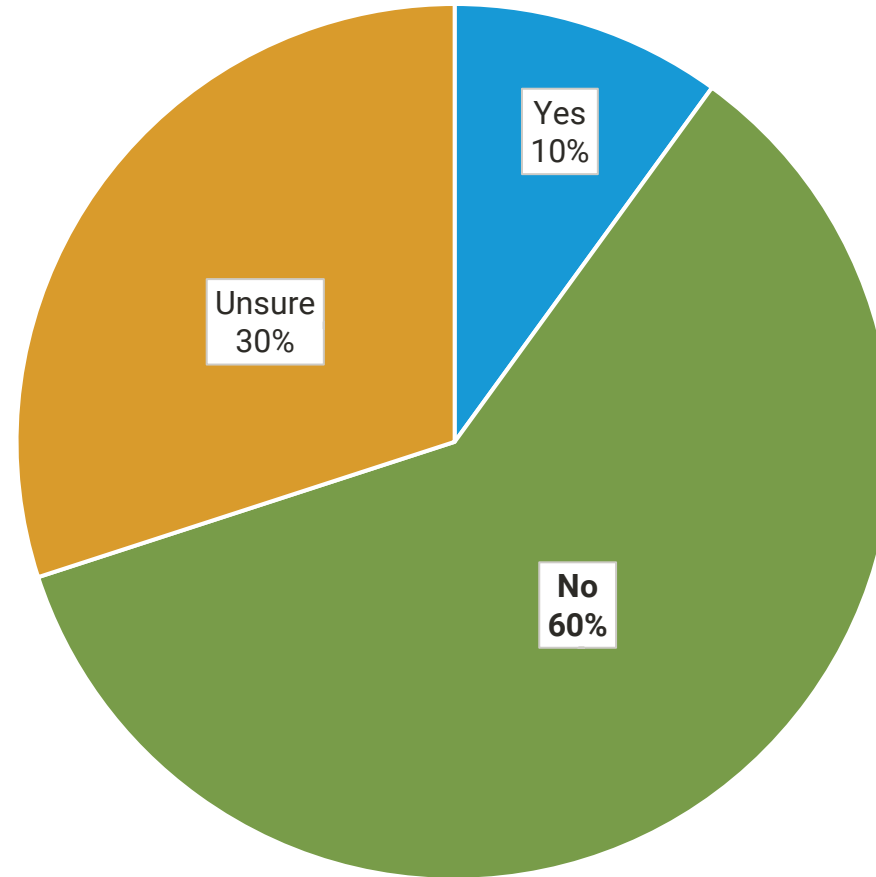
Base=99

Q63 - What priorities are driving integration of nature-based solutions? (Select all that apply)



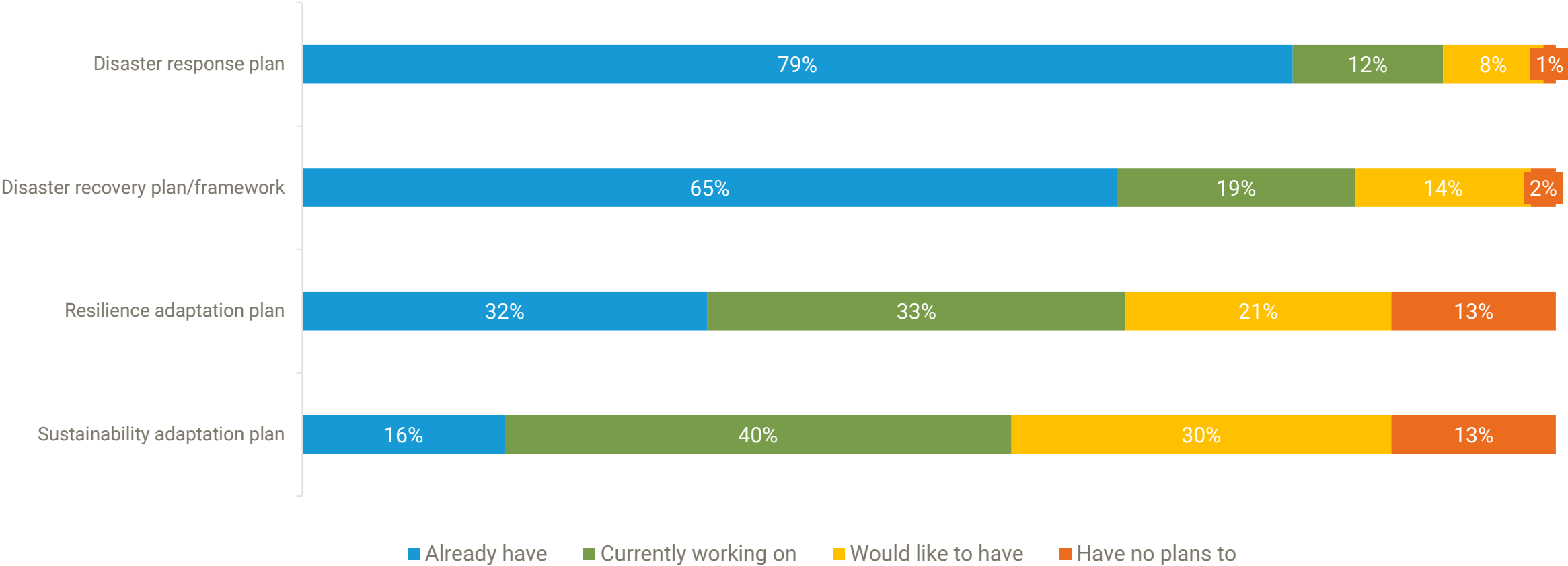
Base=99

Q64 - Do you use a climate analytics platform for future predictions? (Select one)



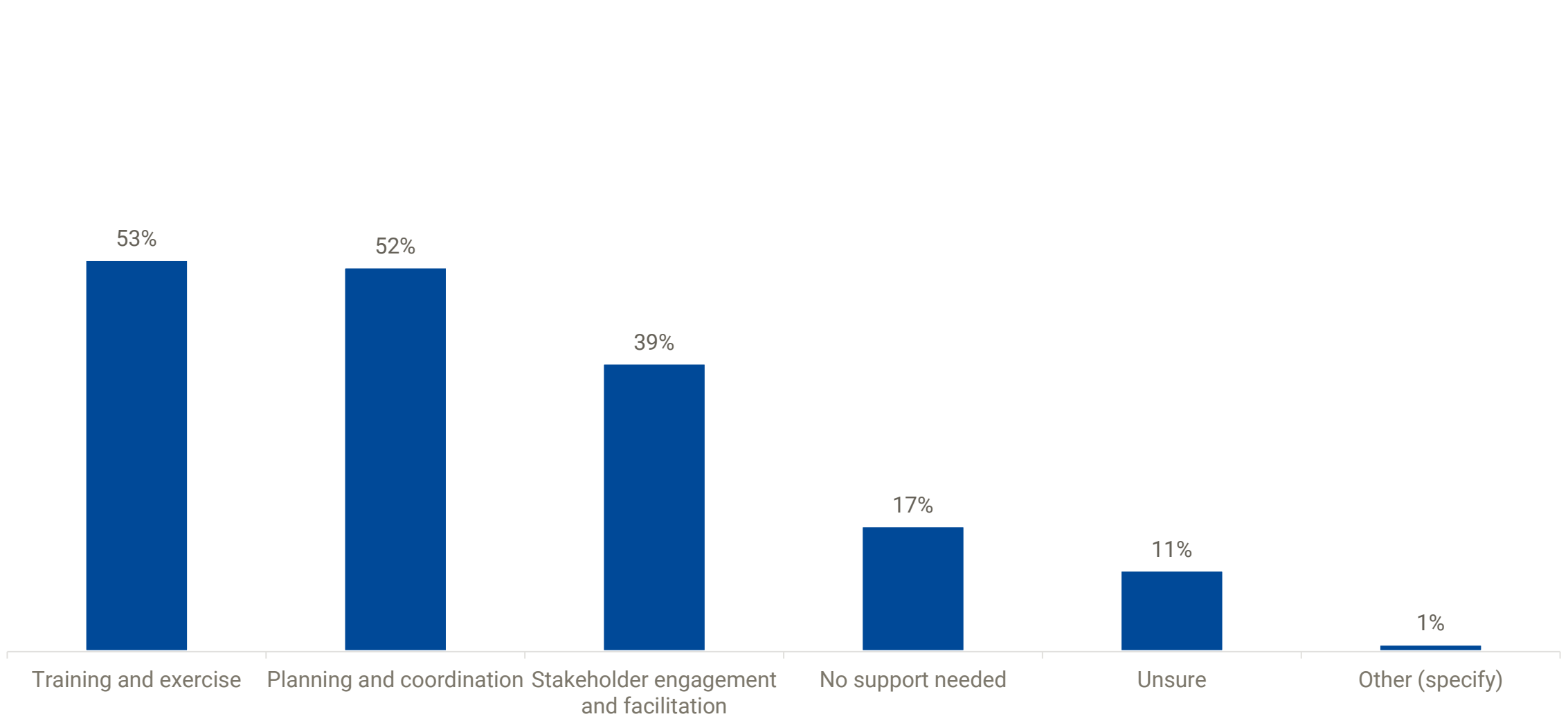
Base=99

Q65 - What is the status for your utility for each of the following? (Select one for each)



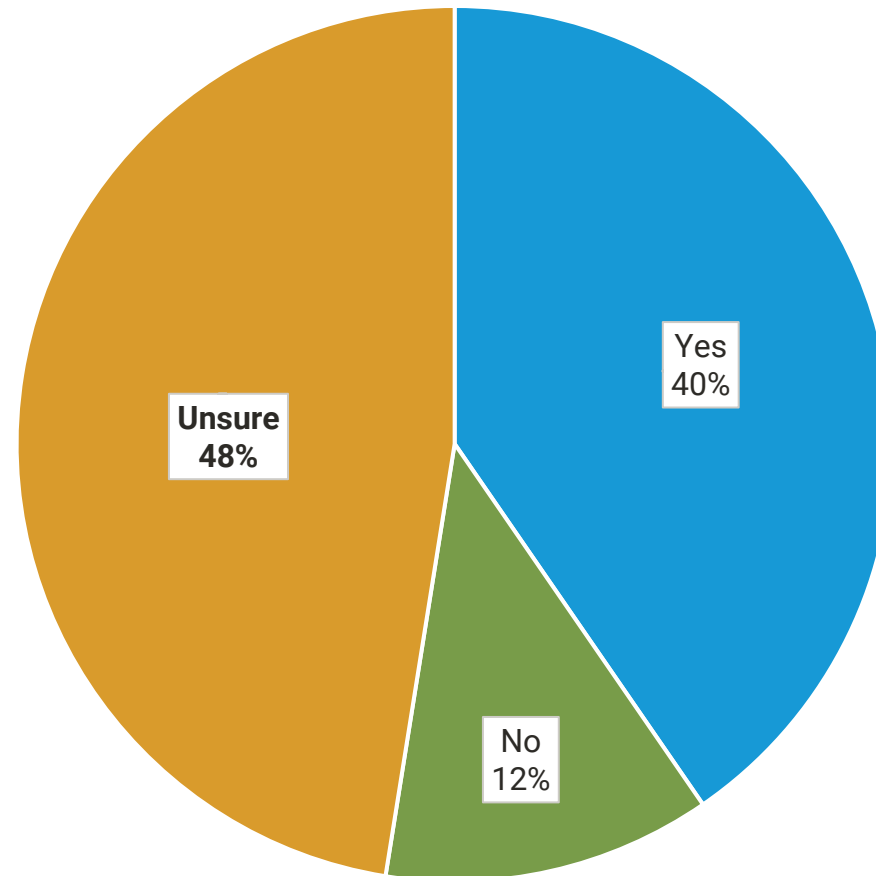
Base=99

Q66 - What support does your utility need to support your disaster response plan?
(Select all that apply)



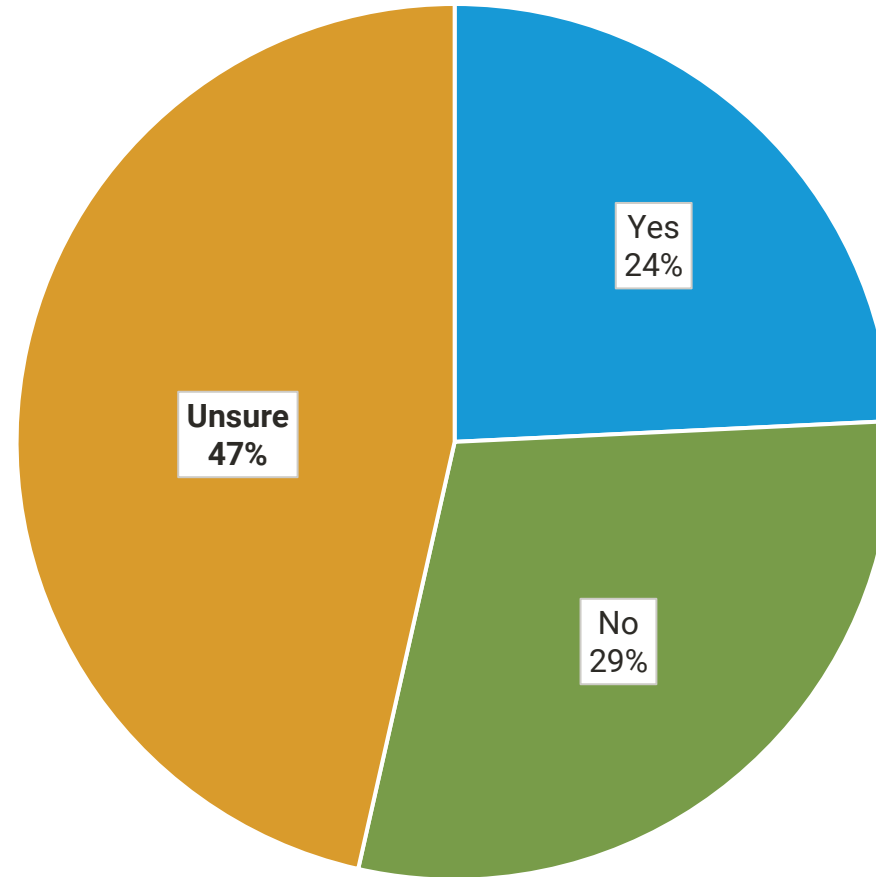
Base=99

Q68 - Is your utility a part of your local FEMA hazard mitigation plan? (Select one)



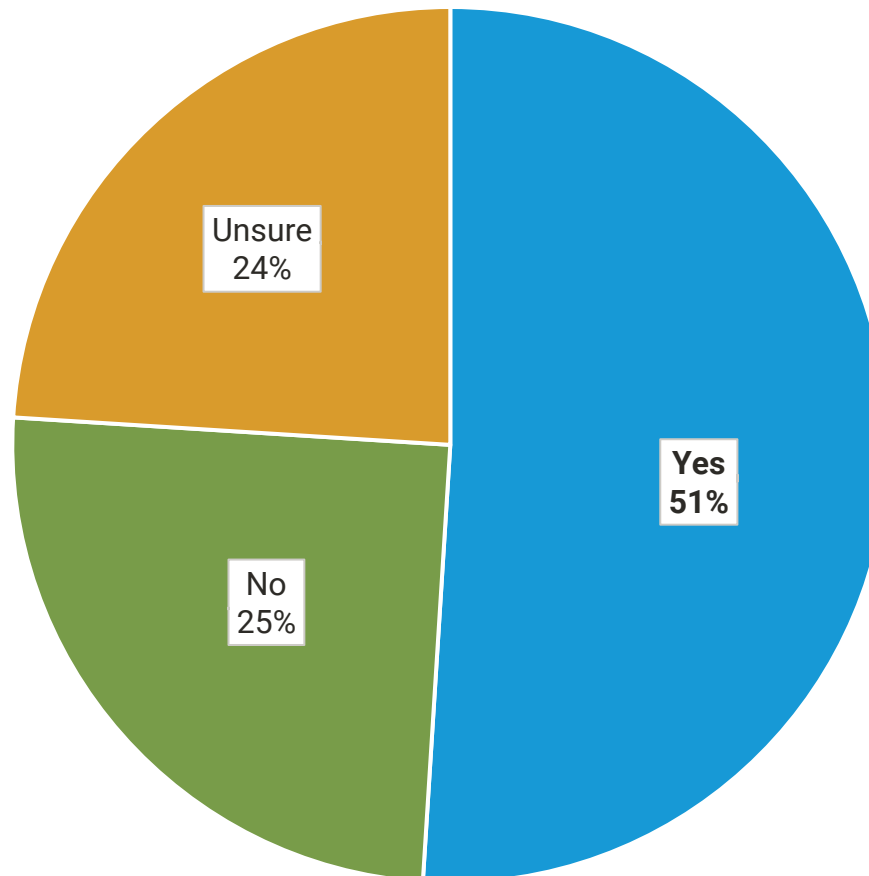
Base=99

Q69 - Does your utility have your own FEMA hazard mitigation plan? (Select one)



Base=99

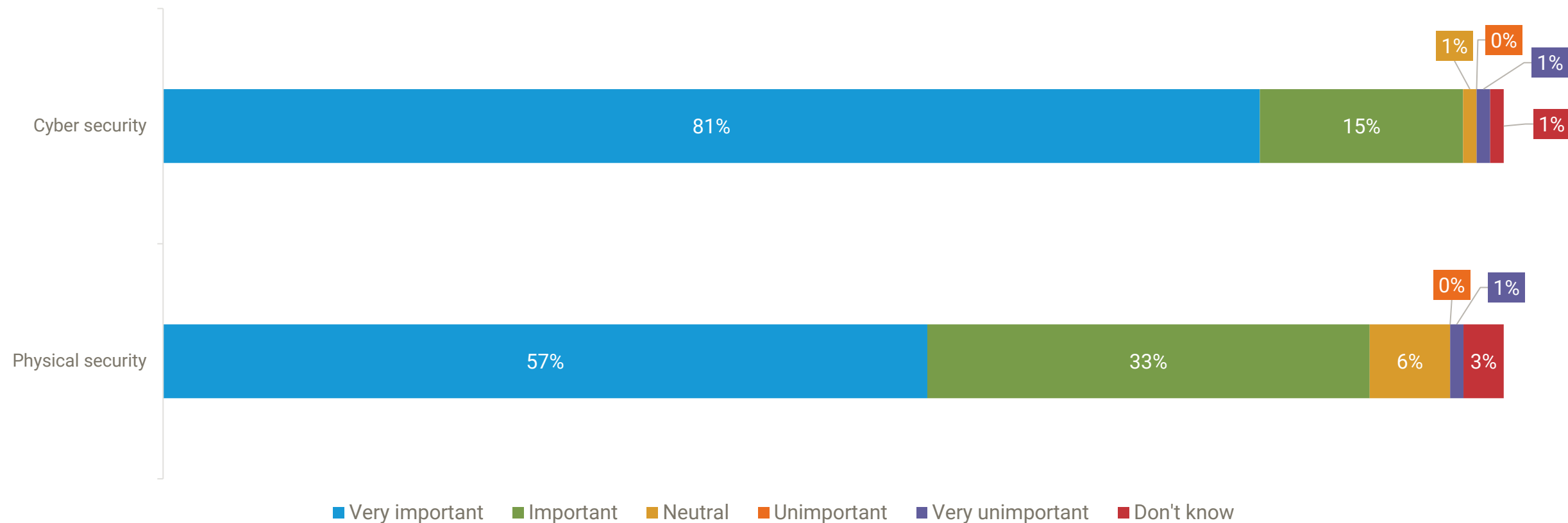
Q70 - Do you currently collaborate with your local electric utility to gauge cross dependencies?
(Select one)



Base=99

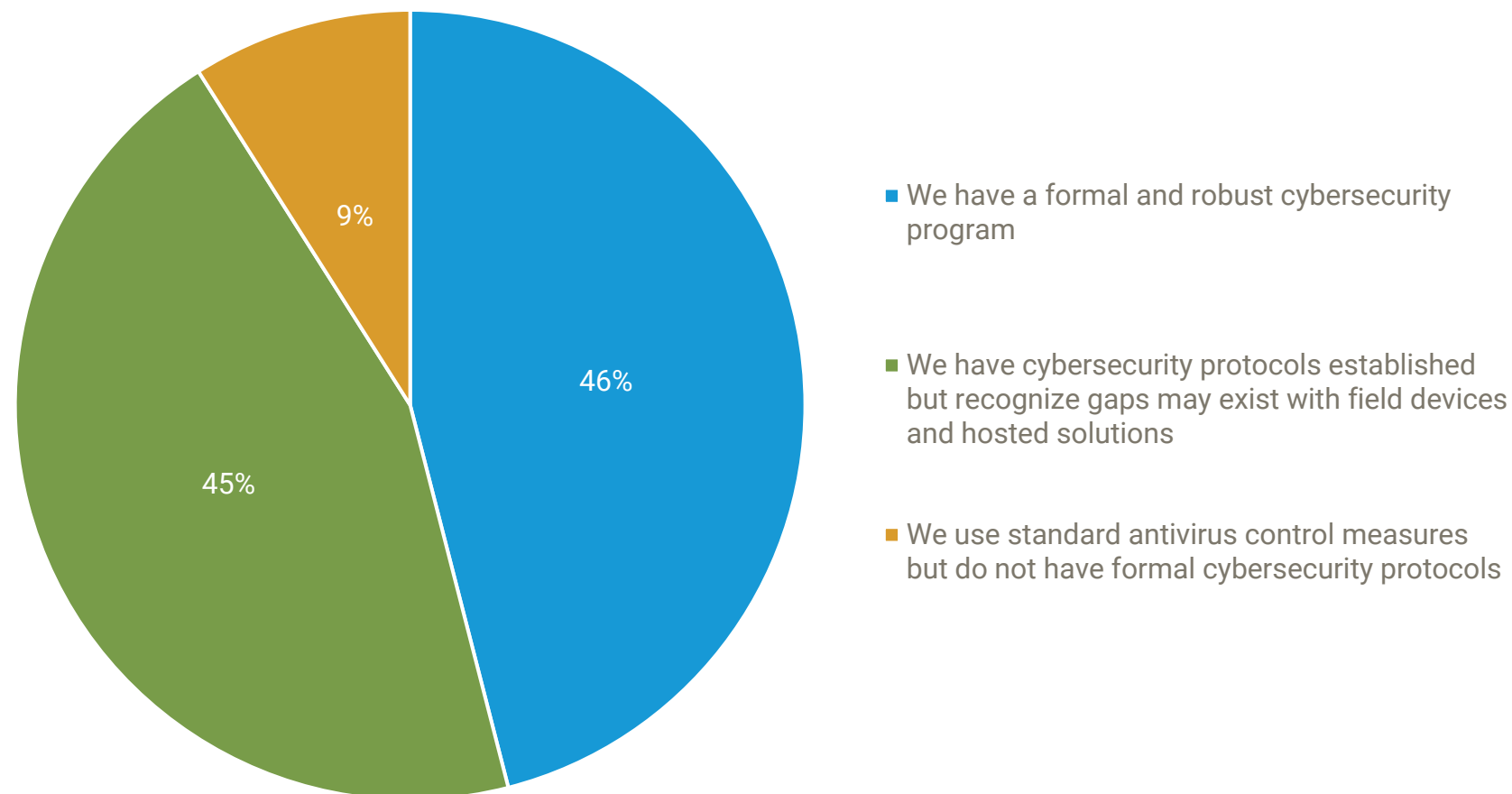
Cybersecurity

Q72 - How important is the investment in the security of your assets? (Select one for each row)



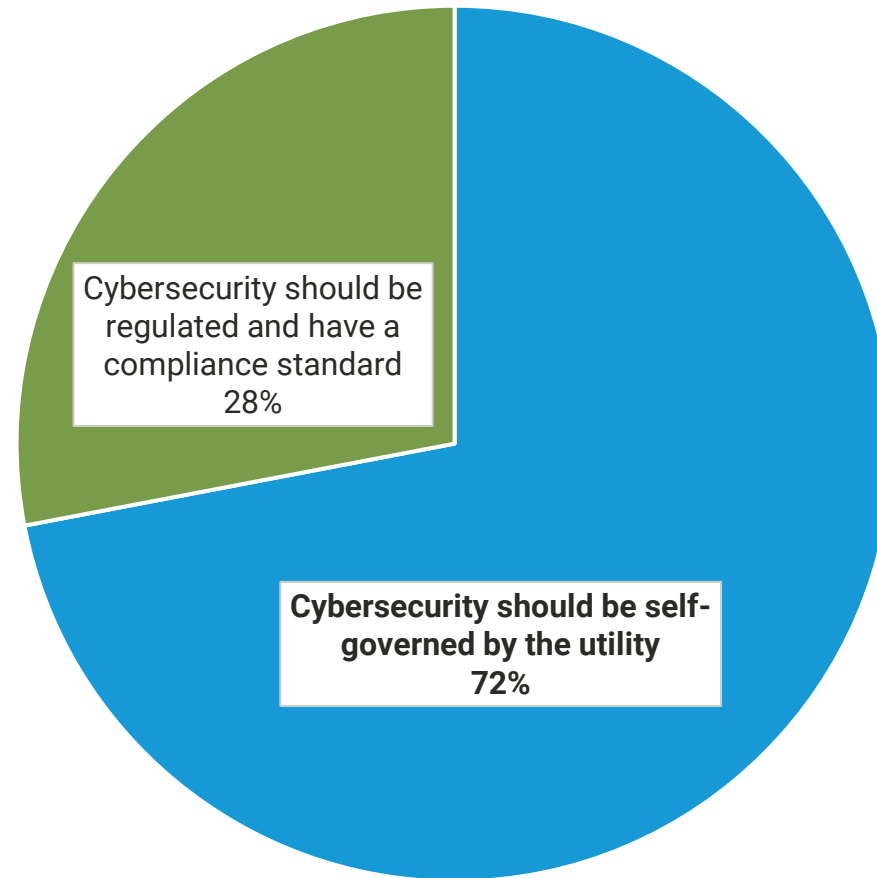
Base=67

Q73 - Which statement best reflects the security of your IT/OT systems and networks?
(Select one)



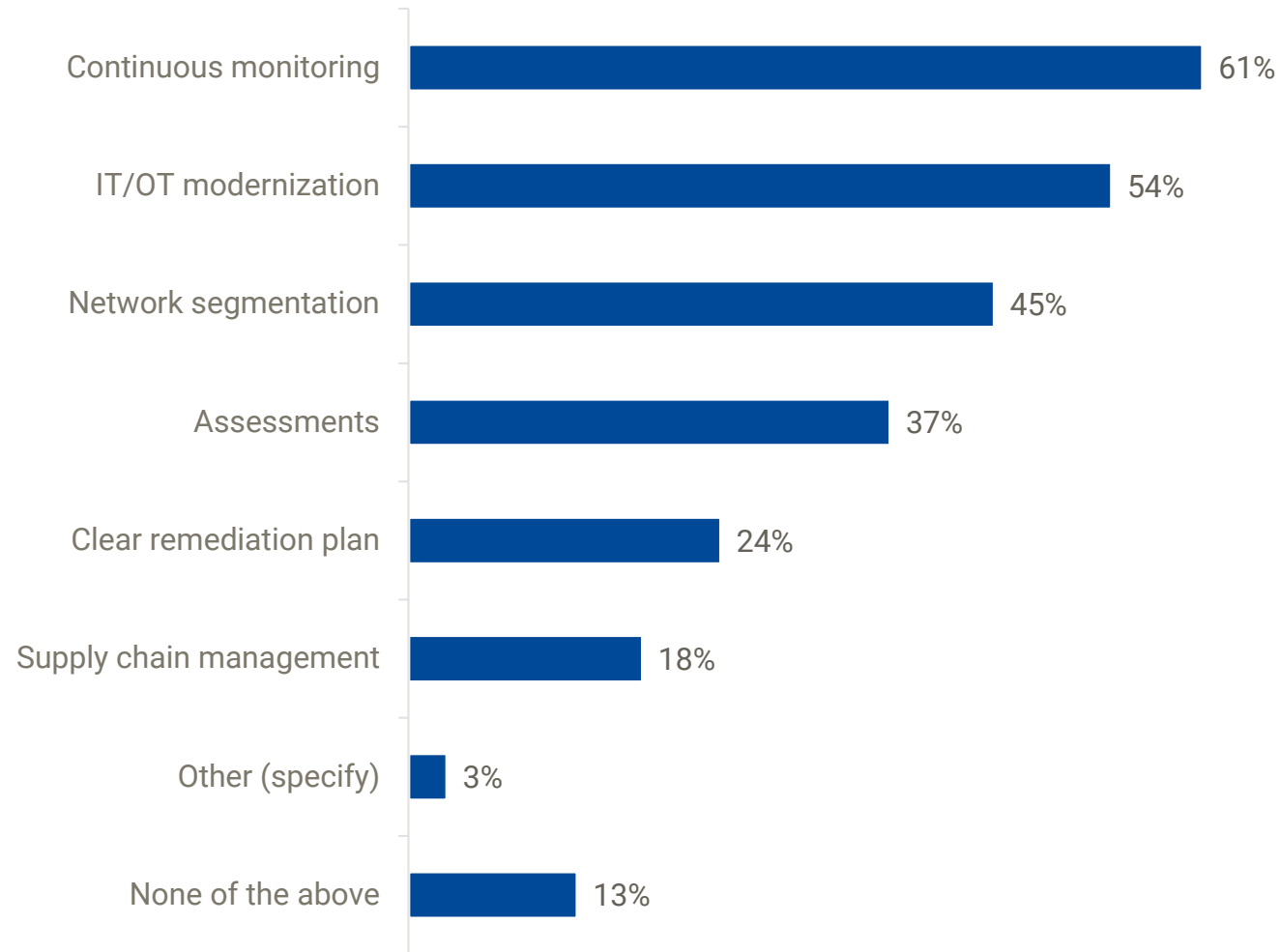
Base=67

Q74 - Would you prefer cybersecurity to be regulated and have a compliance standard, or prefer it to be self-governed by the utility? (Select one)



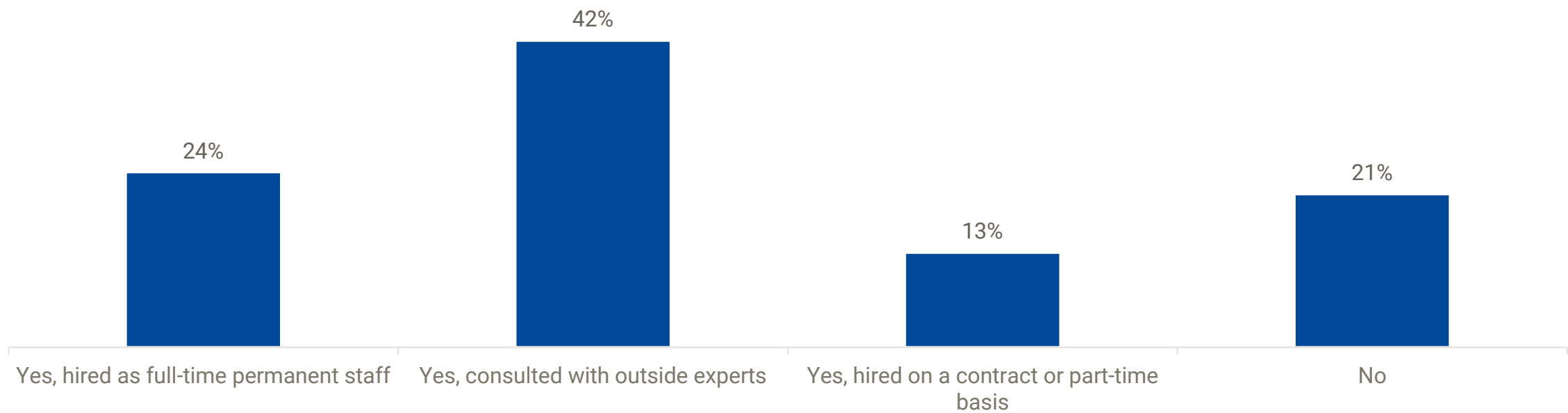
Base=67

Q75 - Which of the following efforts are needed most for your utility to mitigate cybersecurity risks? (Select all that apply)



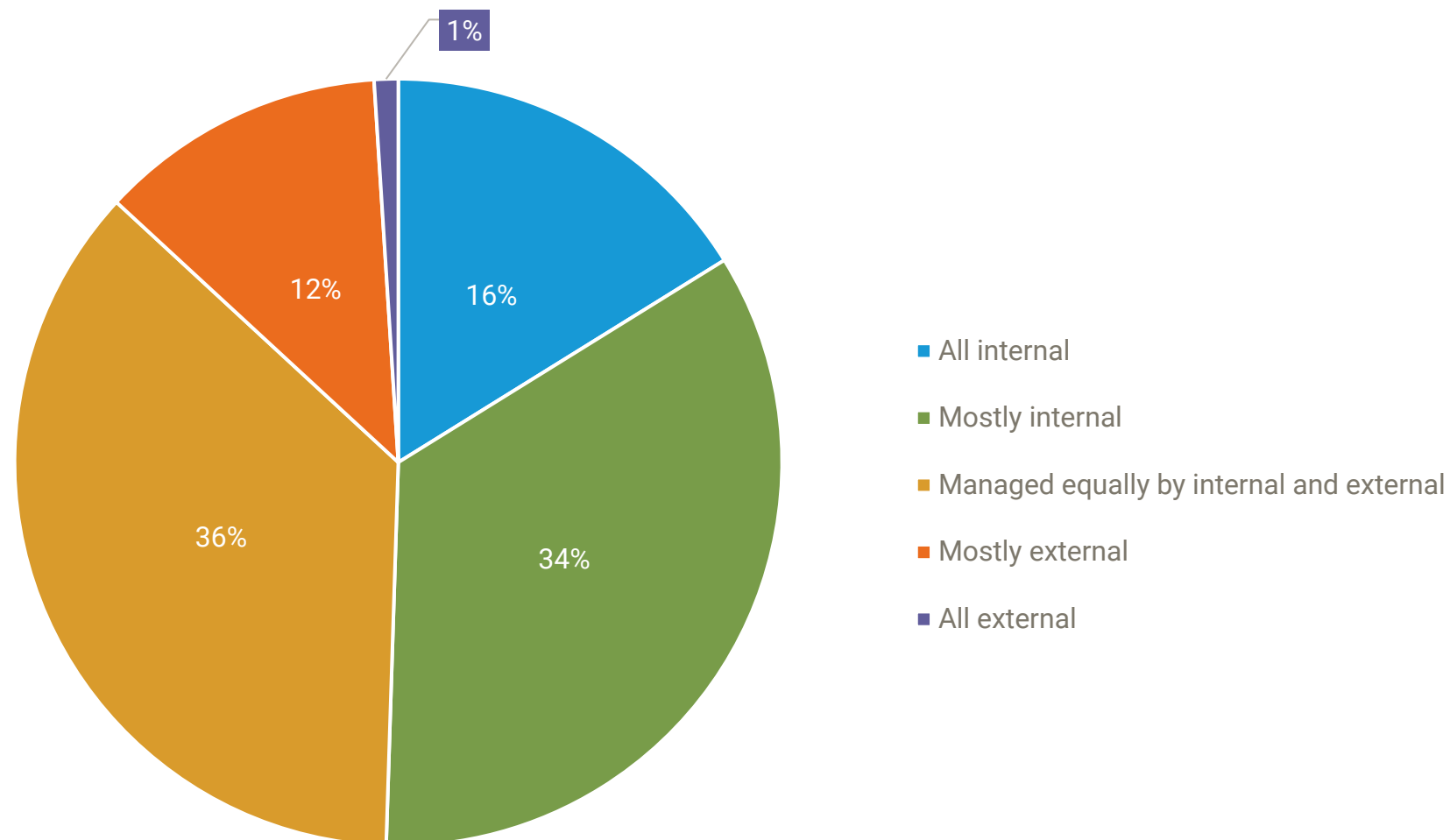
Base=67

Q76 - Has your utility hired or consulted with cybersecurity experts or information security engineers? (Select all that apply)



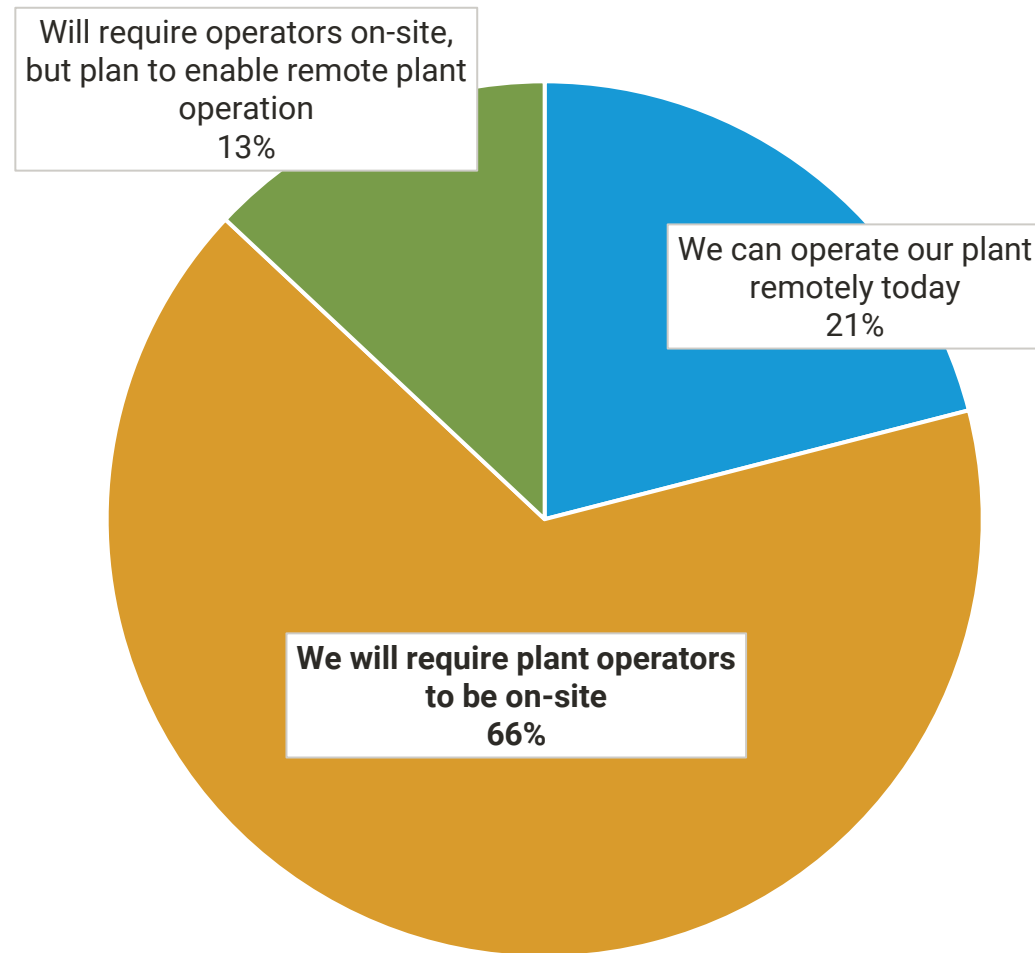
Base=67

Q77 - Would you prefer cybersecurity to be handled by your internal staff, or prefer it be handed by an external supplier? (Select one)



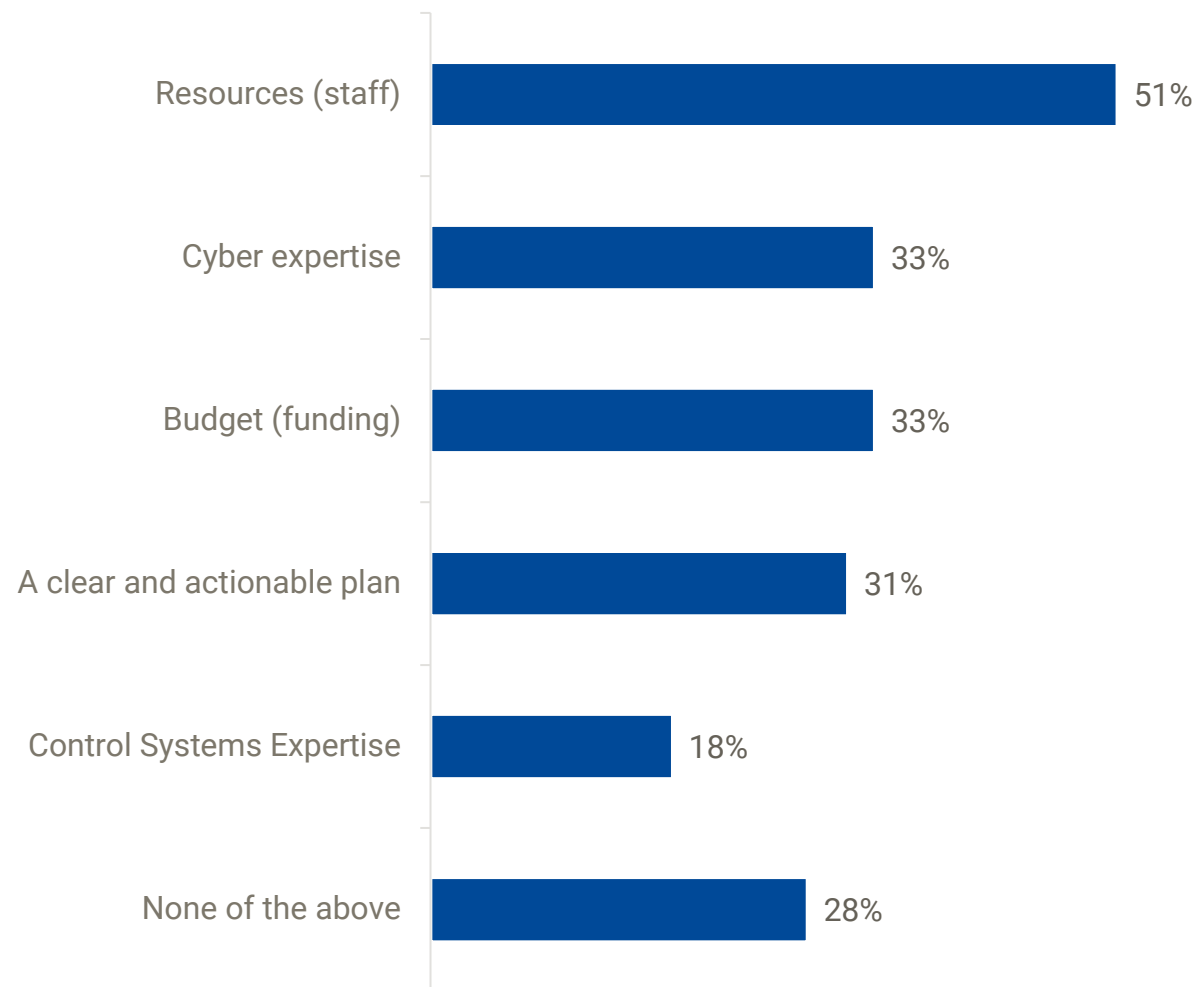
Base=67

Q78 - Given rising cybersecurity concerns and the remote work dynamic, what is your utility's plan for remote plant operation? (Select one)



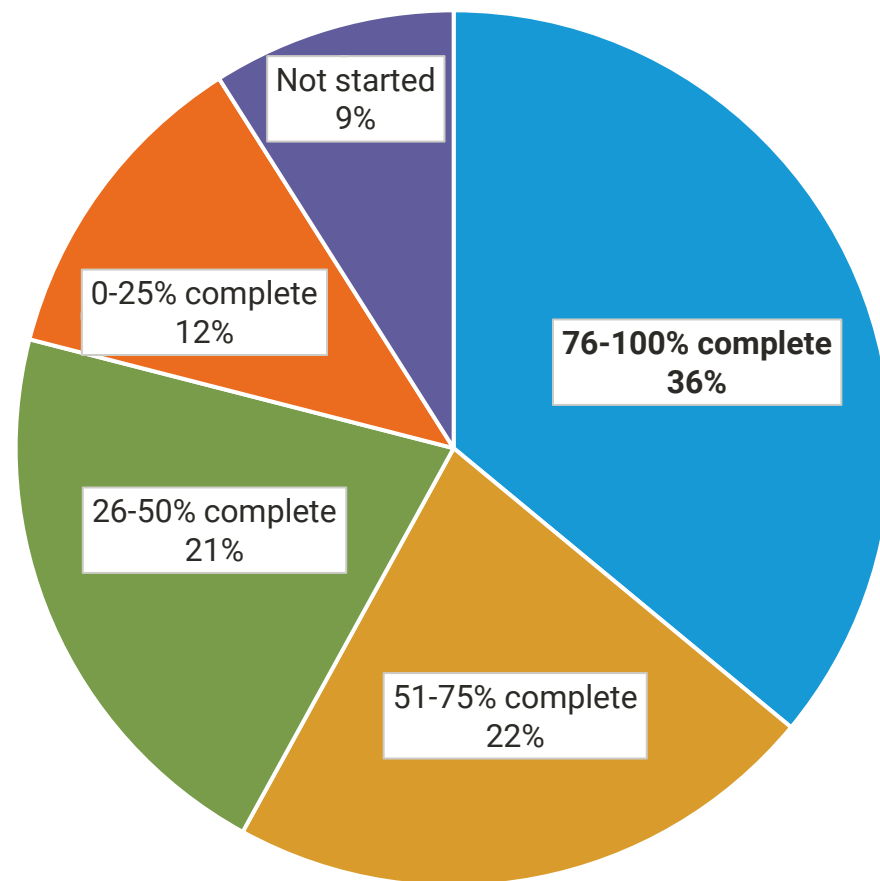
Base=67

Q79 - What is preventing you most from advancing the cybersecurity of your control system(s)?
(Select up to three)



Base=67

Q80 - What progress have you made remediating cybersecurity risk identified in your recent AWIA assessment? (Select one)



Base=67

Digital Water

Q82 - To what extent is your company's data or digital solutions strategy achieving objectives?
(Select one)



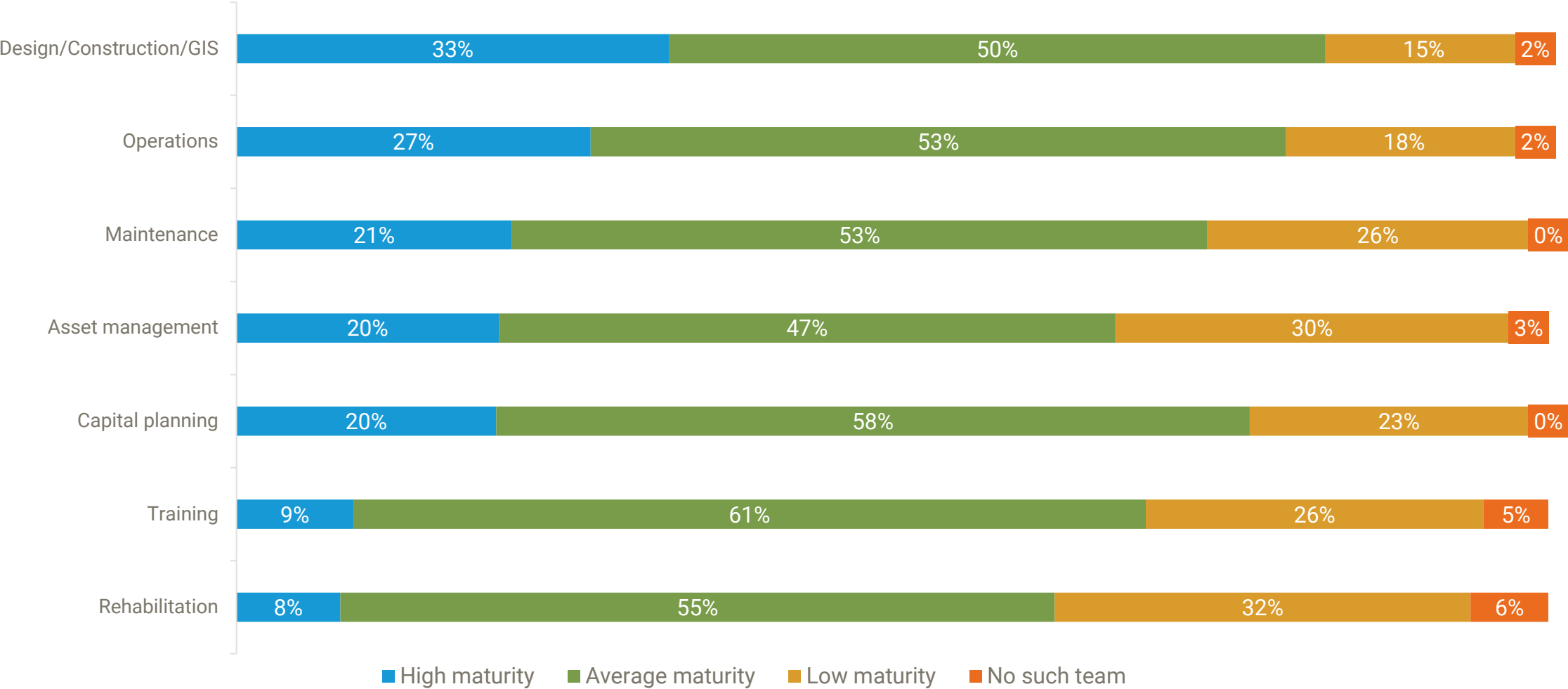
Base=66

Q83 - What are the top objectives for your data or digital solutions strategy (Select up to three)

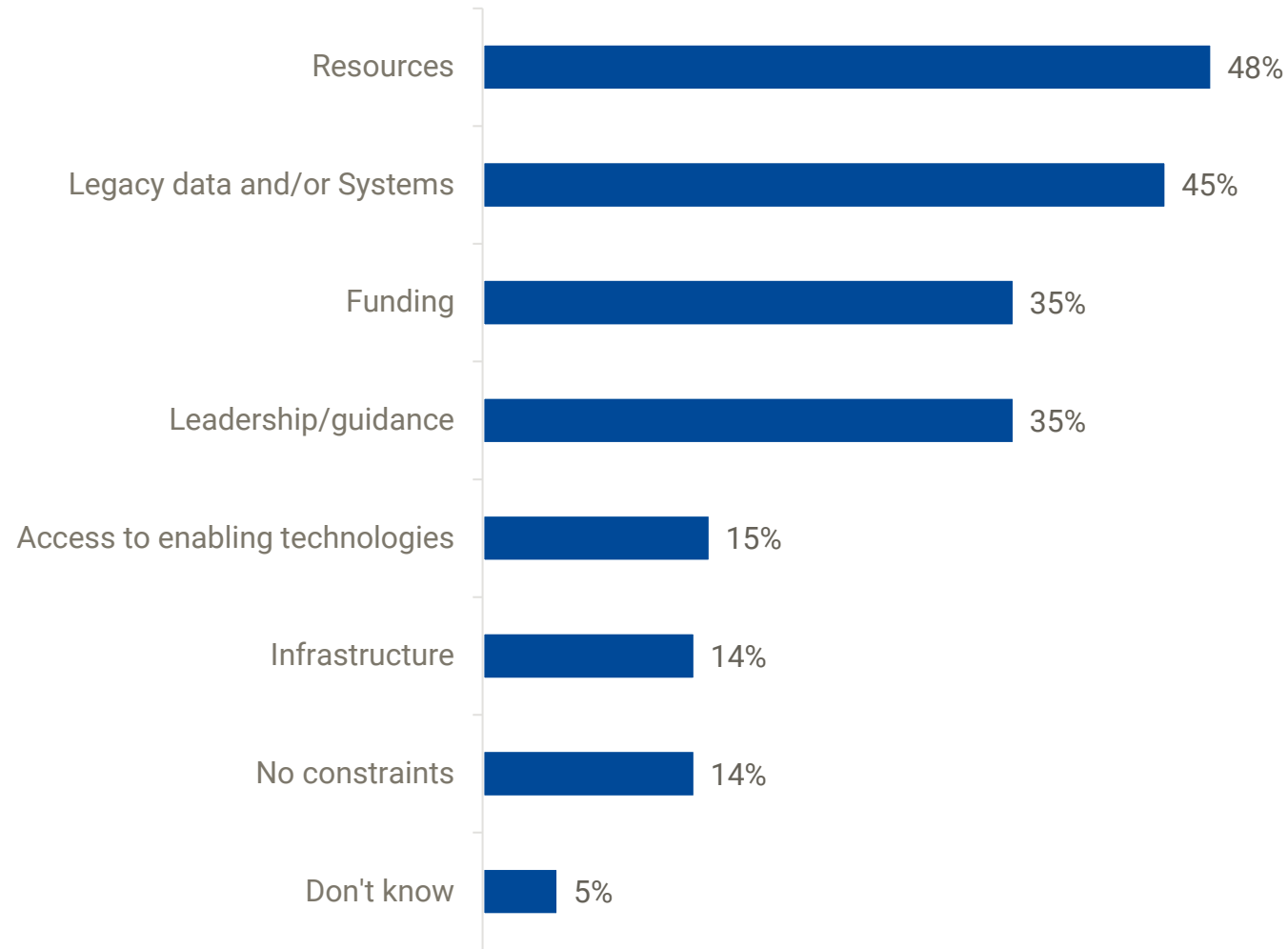


Base=66

Q84 - How would you rate the maturity level using data or digital solutions for each of the following parts of your organization? (Select one per row)

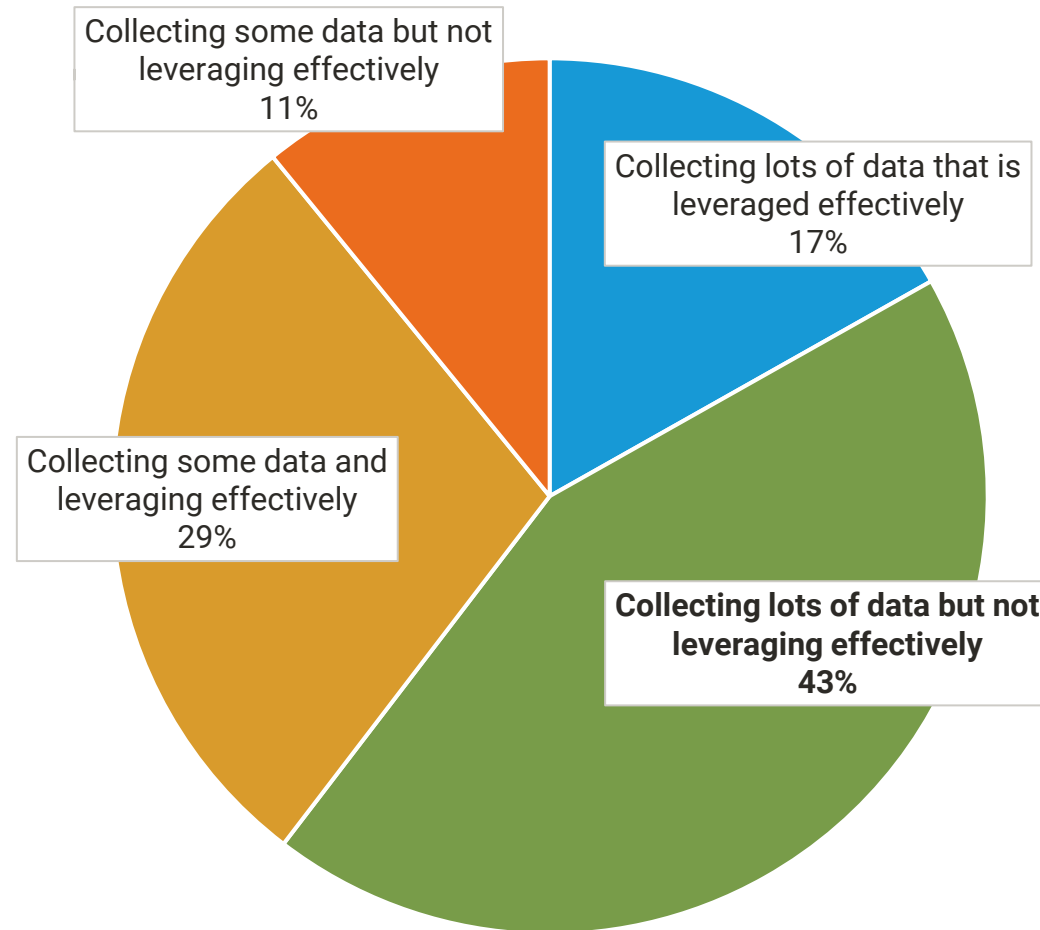


Q85 - Which of the following constraints impair or preclude your utility from adopting digital solutions? (Select up to three)



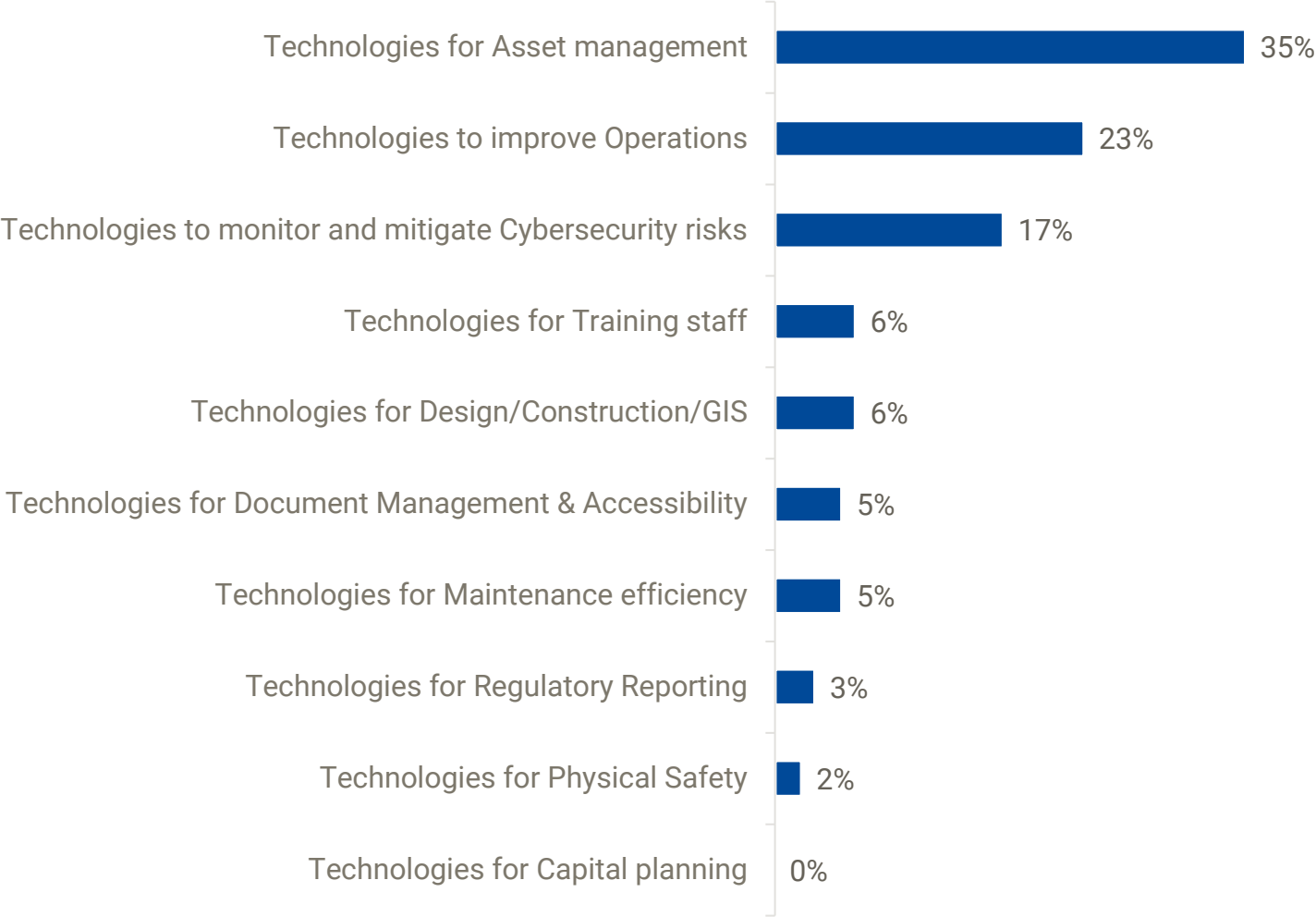
Base=66

Q86 - Which of the following statements best describe the current data management practice at your organization? (Select one)



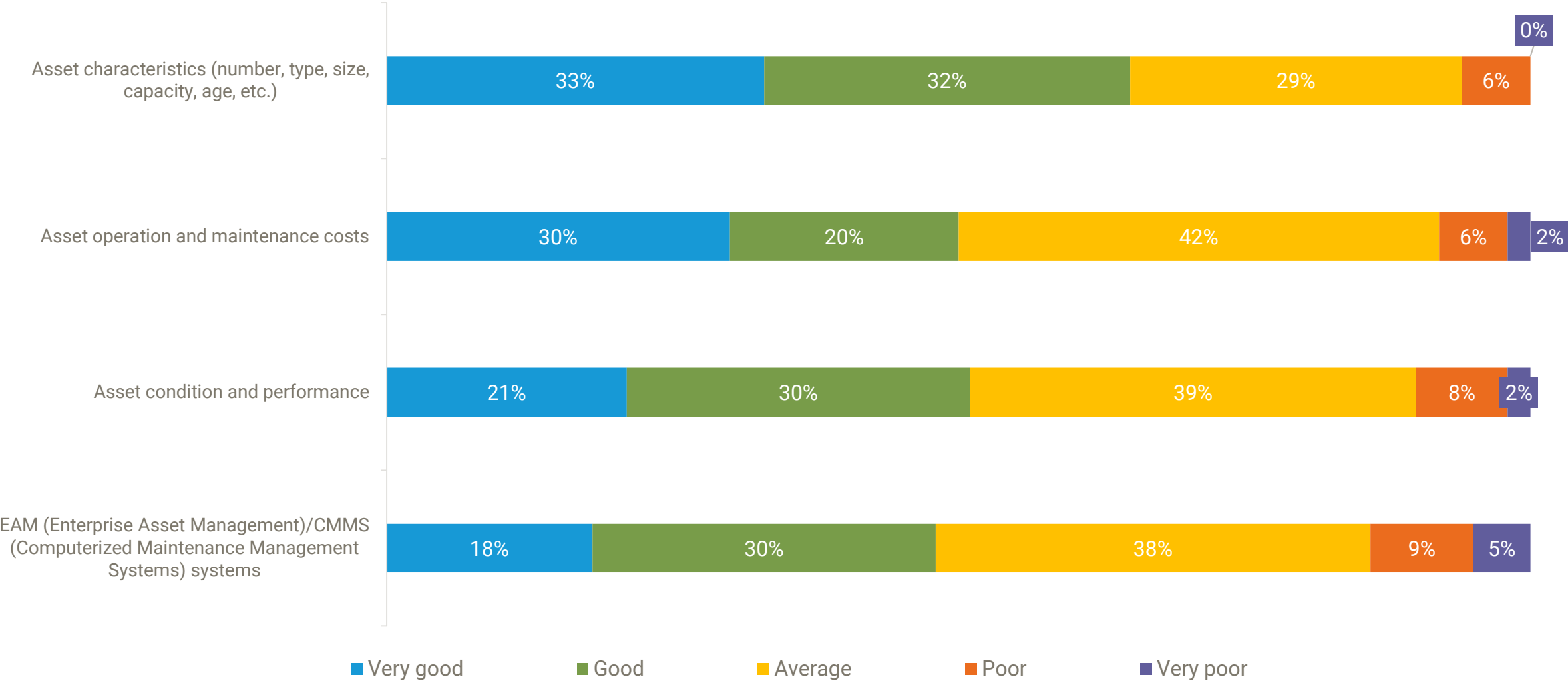
Base=66

Q87 - Which type of new technology should water utilities emphasize MOST? (Select one)

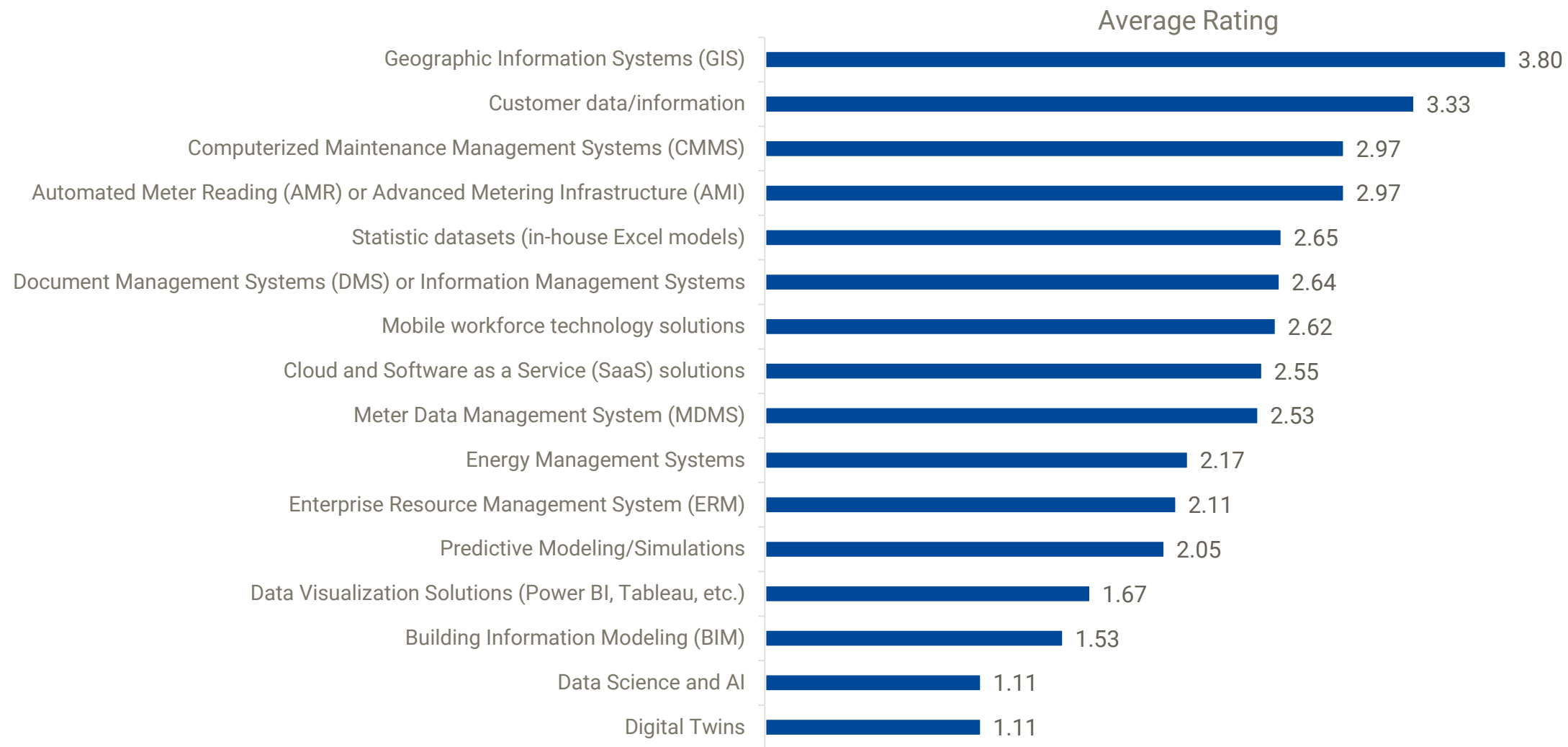


Base=66

Q88 - How would you describe the quality of the information that your utility has on the assets it owns and operates? (Select one for each row)

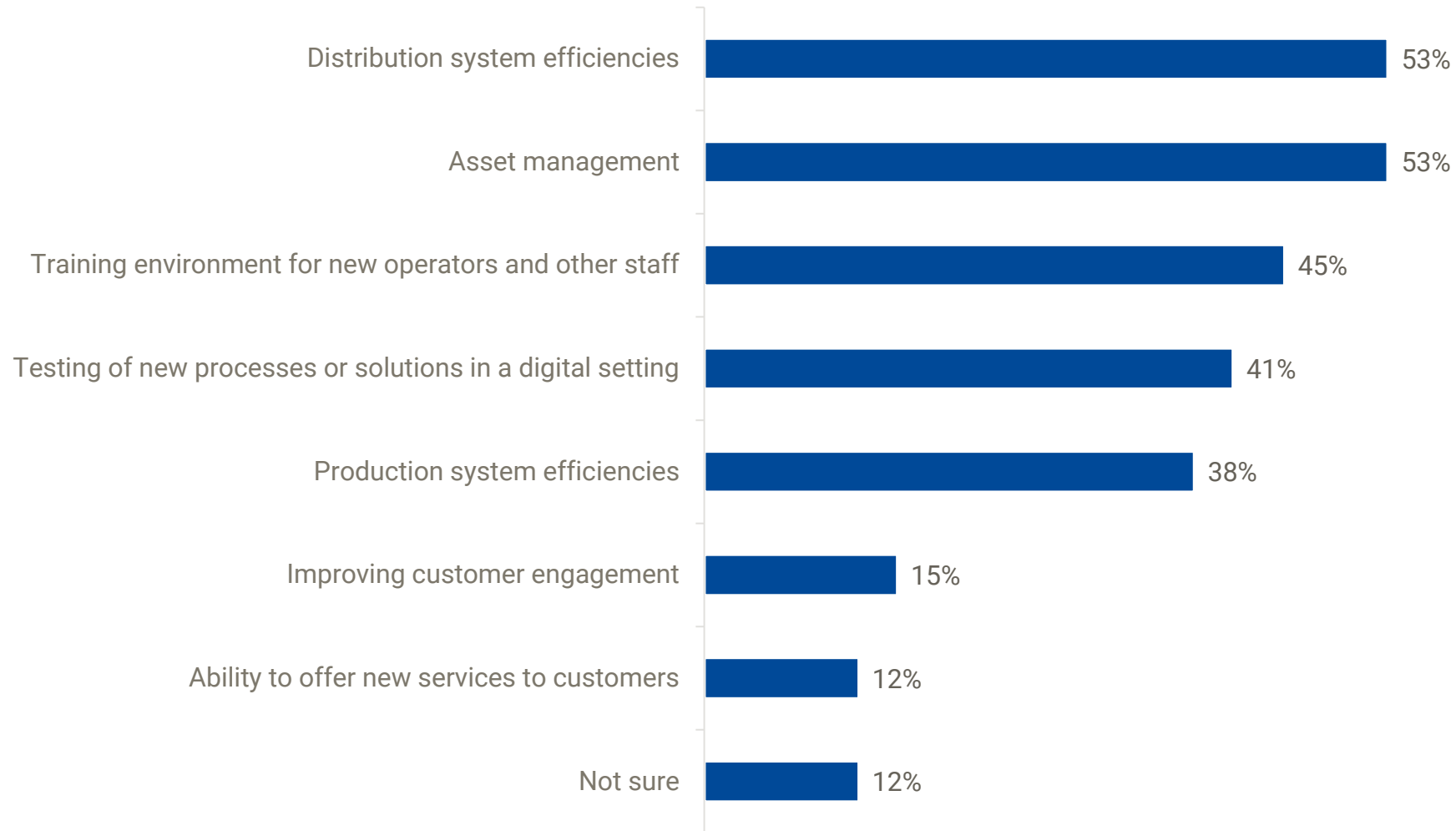


Q89 - Rate your organization's level of expertise with these technologies and data.
(Rate from 0-5 where 0 is completely unfamiliar and 5 is expert)



Base=66

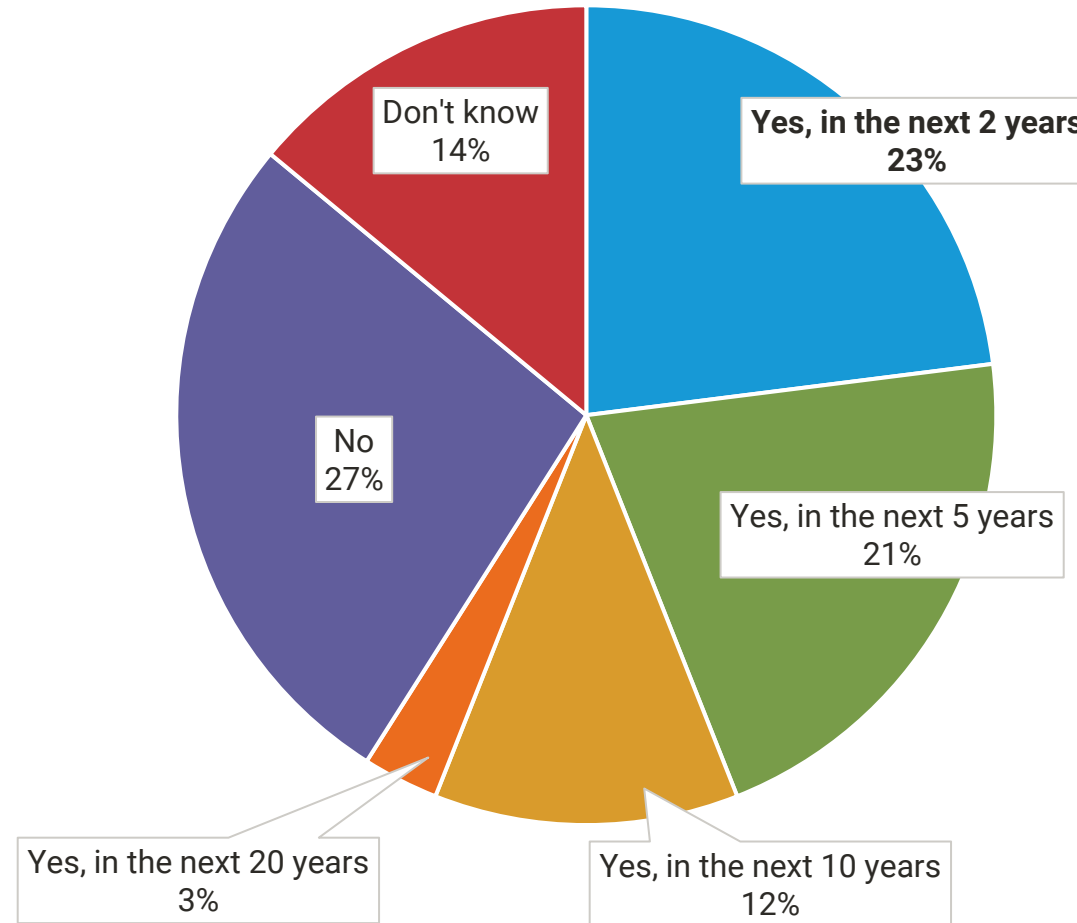
Q90 - Simulation modeling is gaining popularity as a way to replicate physical environments in a digital space. Where do you see the most value for simulation modeling? (Select all that apply)



Base=66

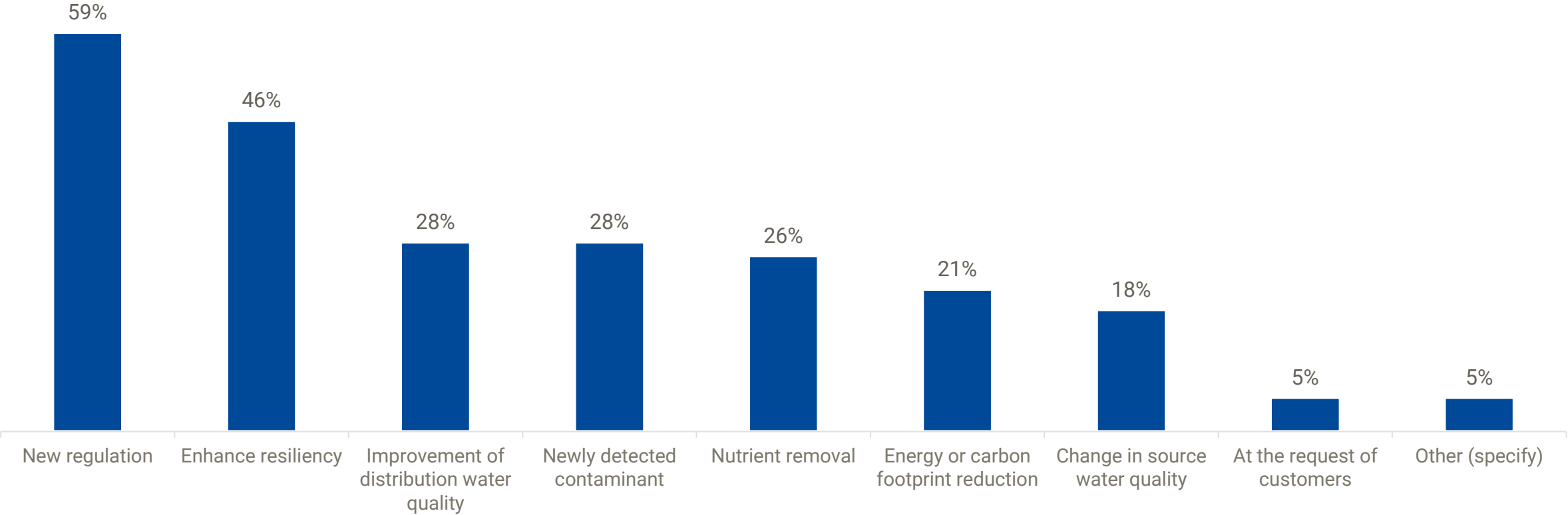
Contaminants

Q92 - Looking forward, will your organization need to add treatment process or significant new treatment technology to your plant to improve water quality? If so, when? (Select one)



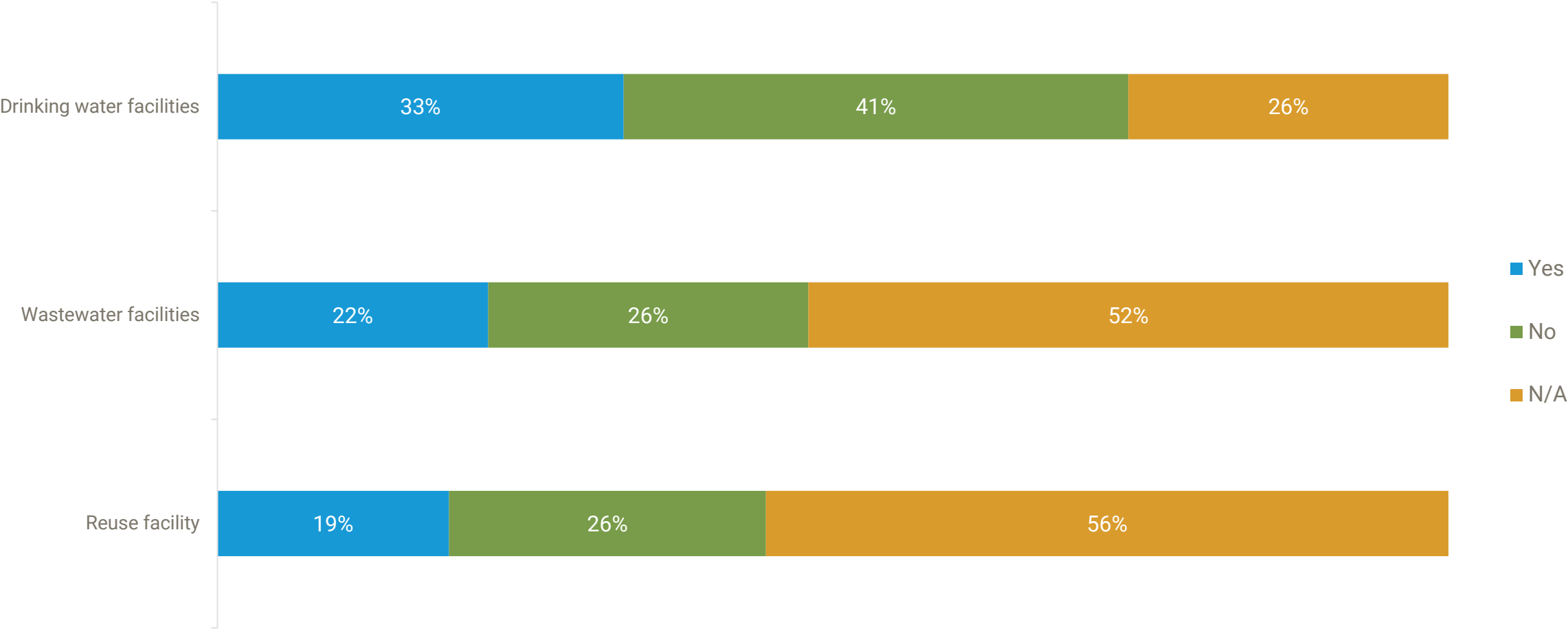
Base=66

Q93 - What reasons do you expect to add a new process or technology? (Select all that apply)



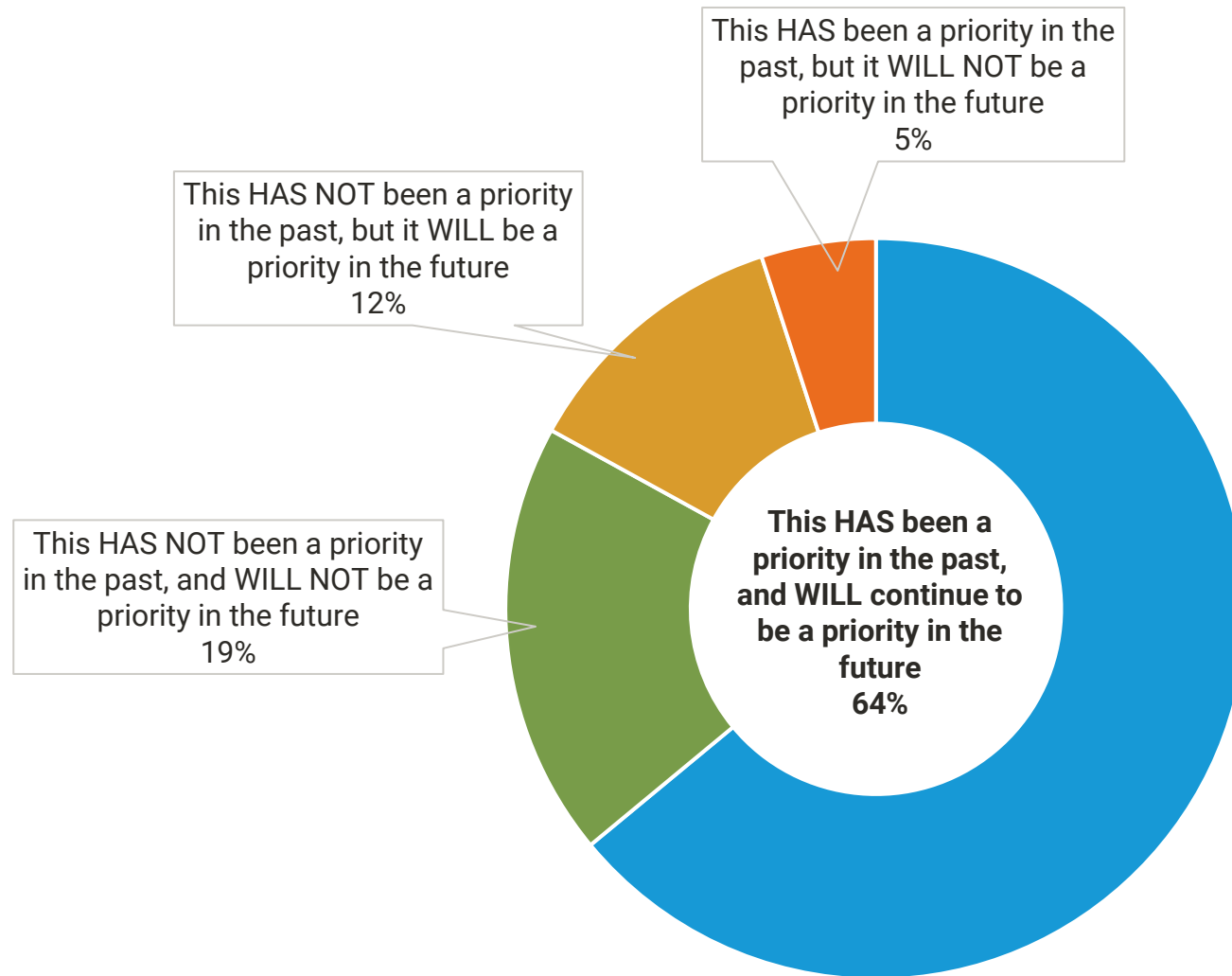
Base=39

Q94 - Do you expect that new treatment processes will be added to your facility(ies) to increase resilience of the water supply? (Select one per row)



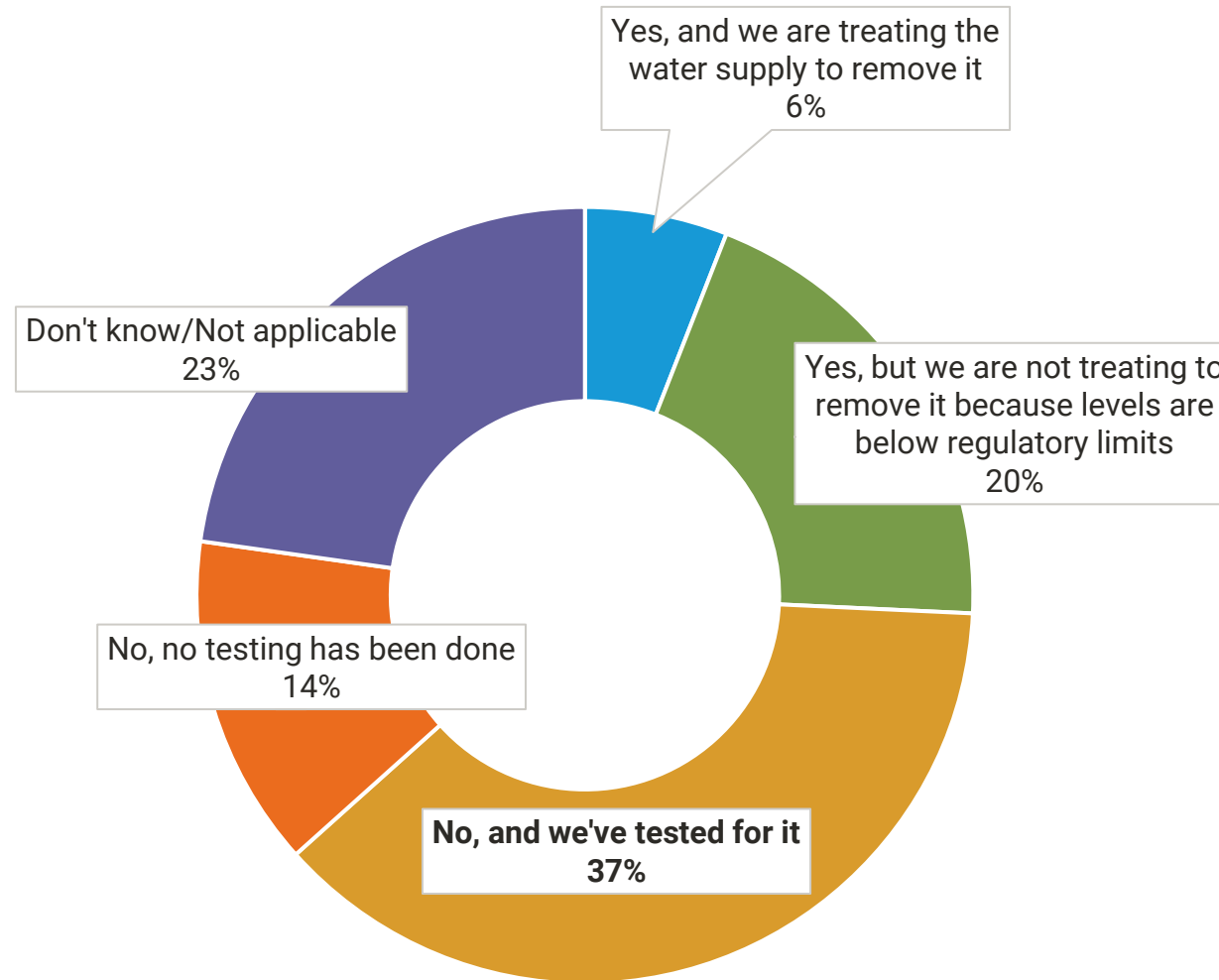
Base=27

Q95 - How is nutrient removal prioritized at your utility? (Select one)



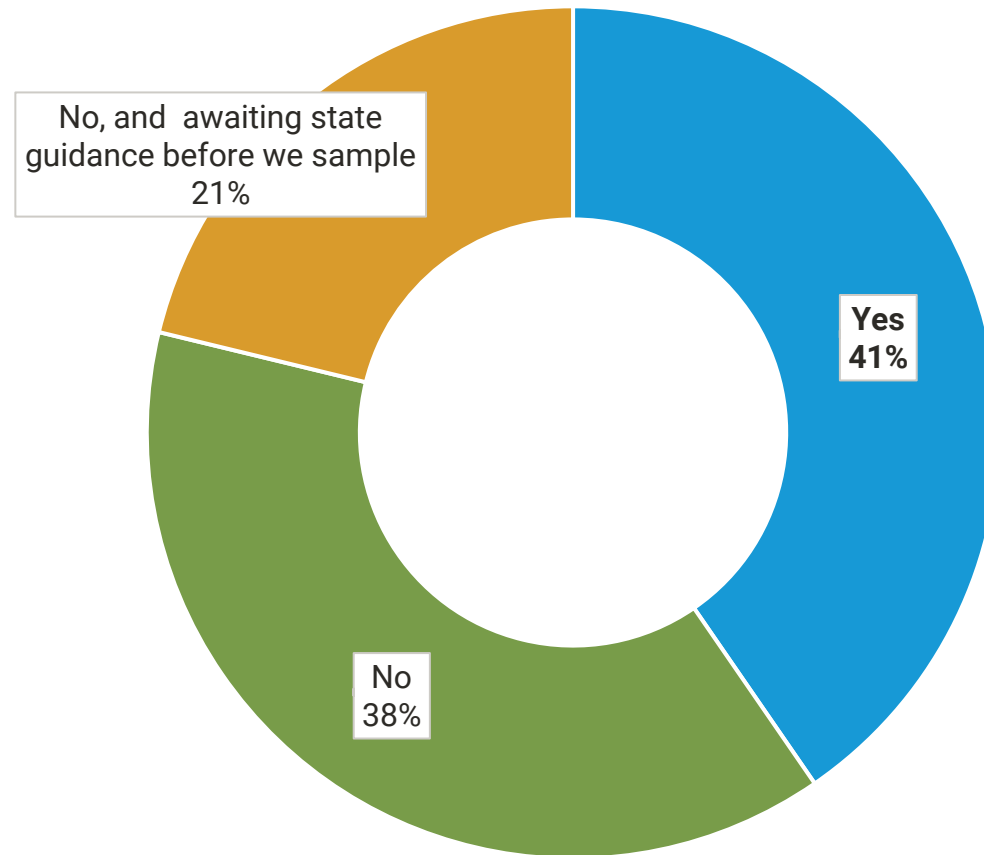
Base=42

Q96 - Has PFAS been detected in your water supply? (Select one)



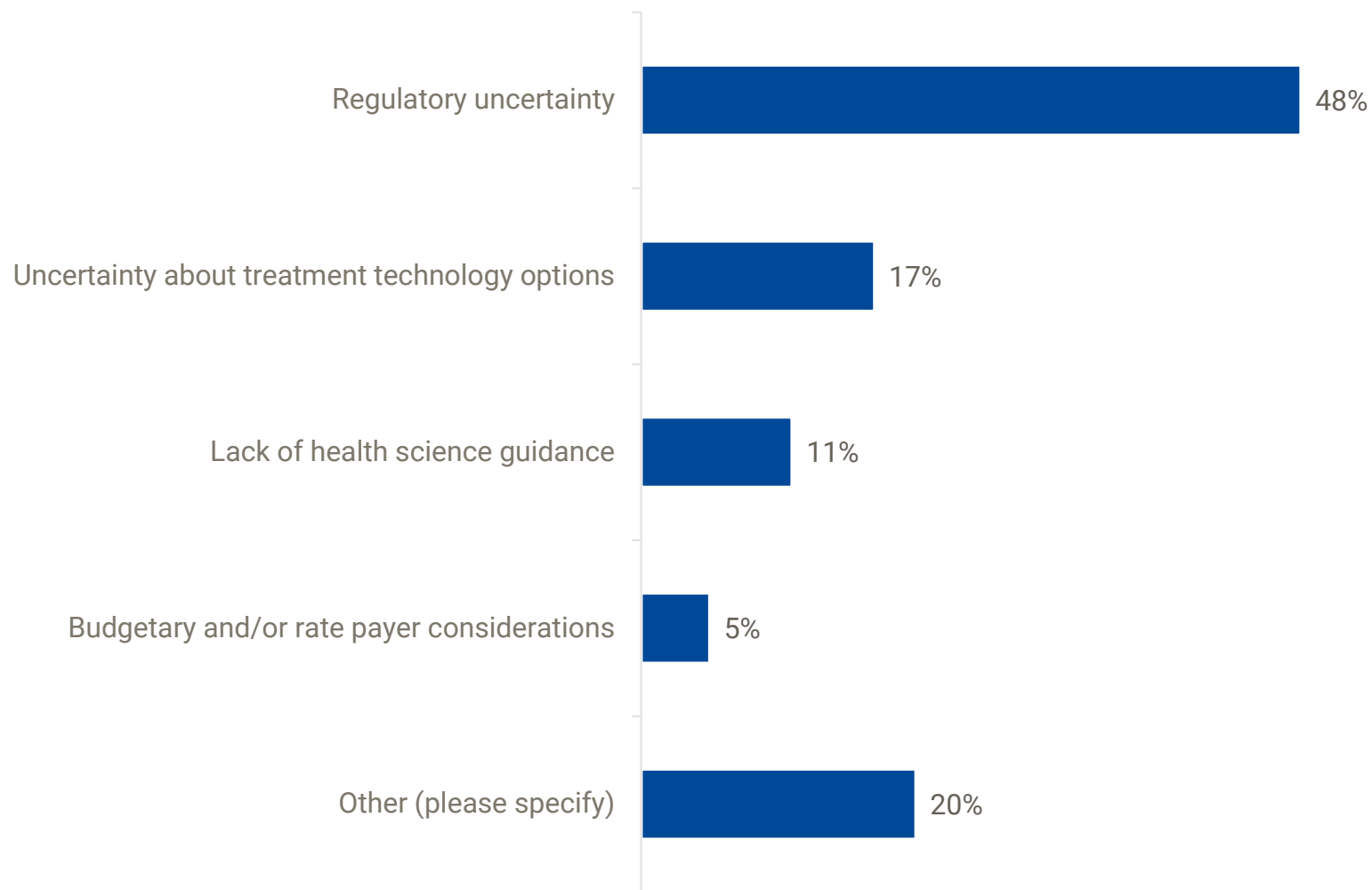
Base=66

Q98 - Have you tested your STP influent, effluent, or biosolids for PFAS content? (Select one)



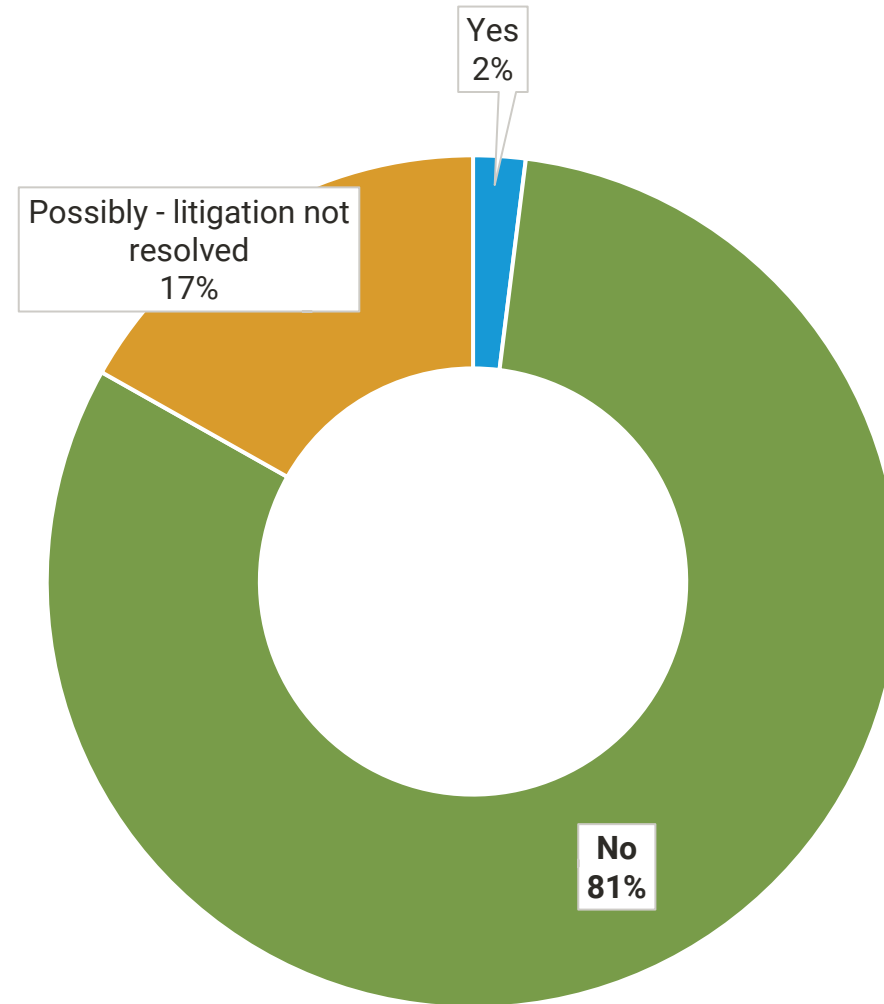
Base=66

Q99 - What's the greatest limiting factor for your utility addressing PFAS in your water?
(Select one)



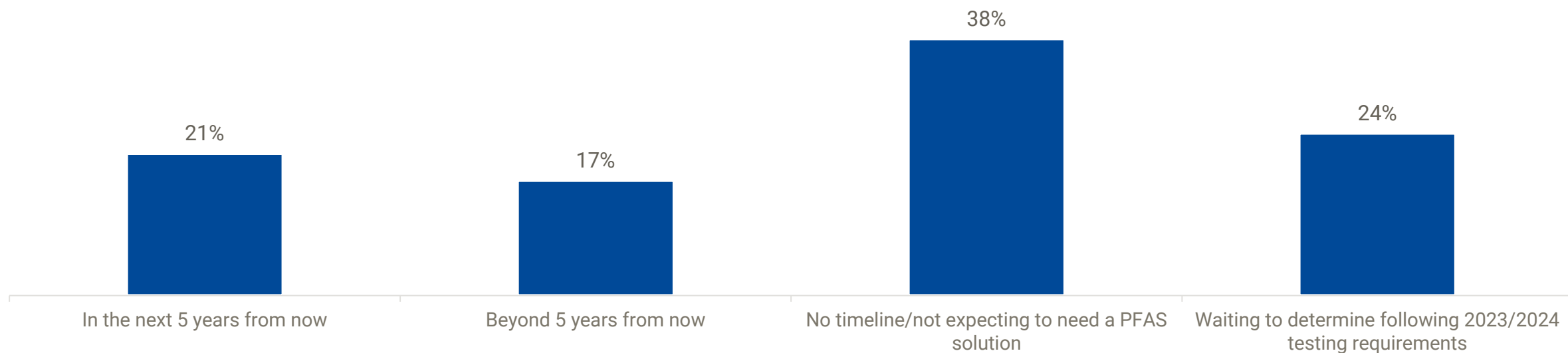
Base=66

Q100 - Are you likely to receive funding from legal settlements to address PFAS contamination?
(Select one)



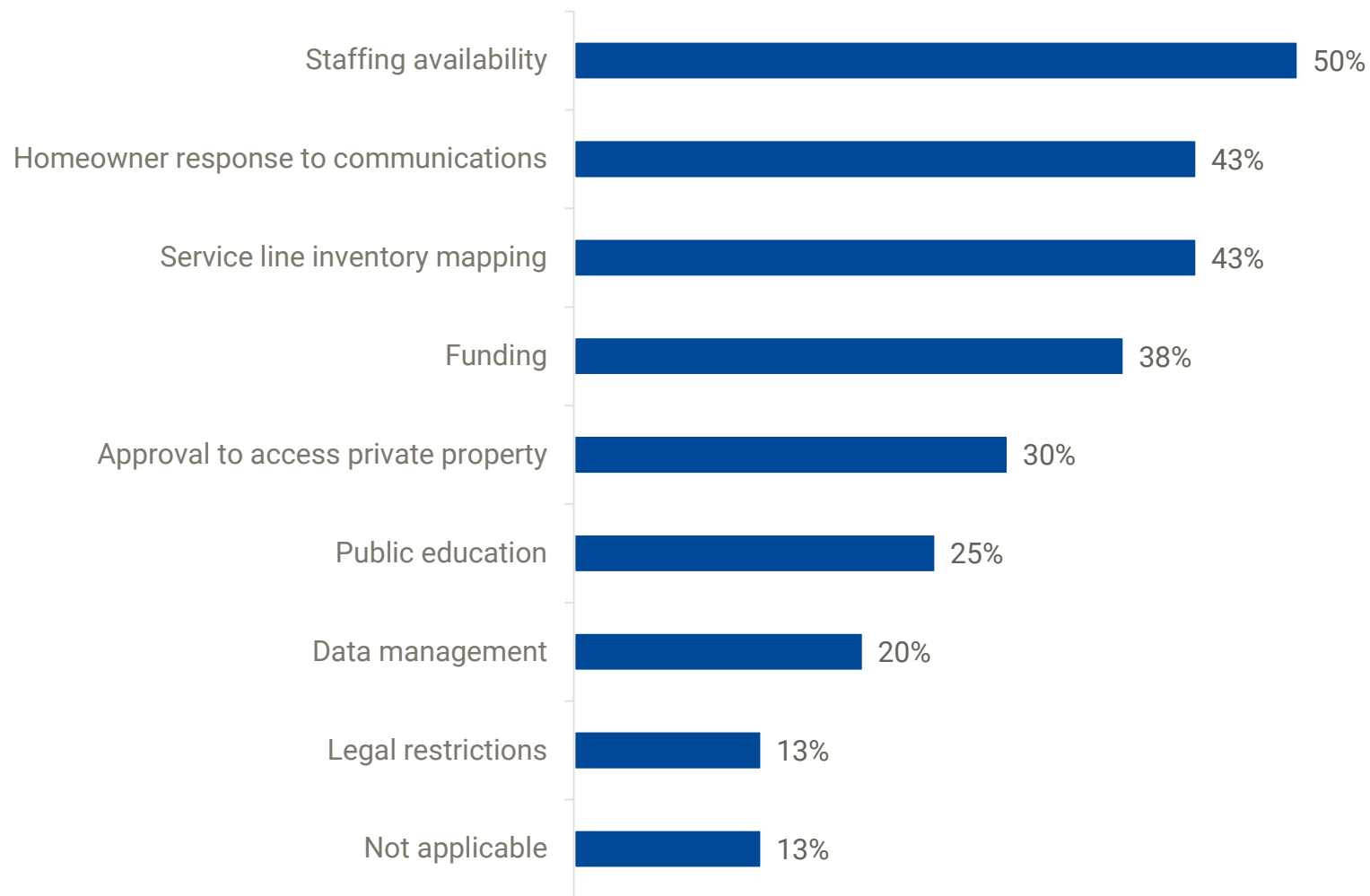
Base=66

Q101 - When do you foresee that you may need to provide a PFAS management/treatment solution? (Select one)



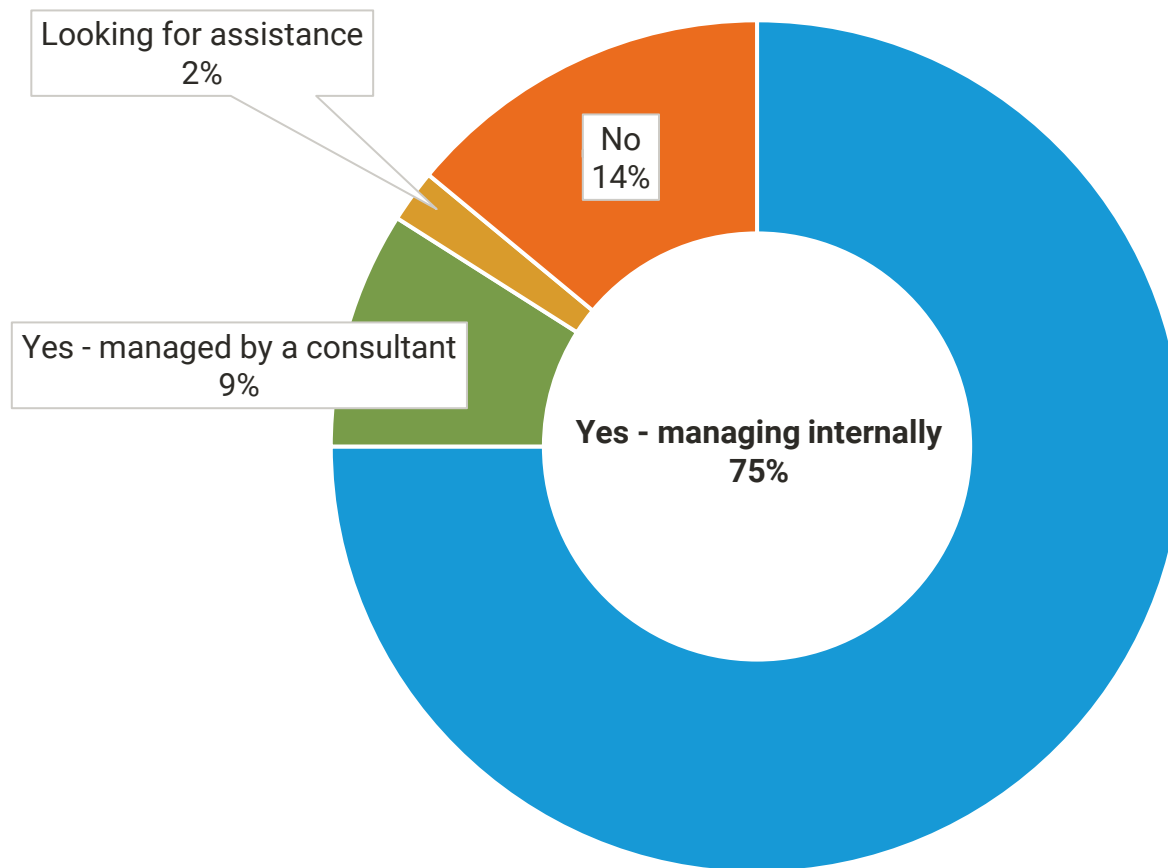
Base=66

Q102 - What are your biggest challenges related to lead/copper rule compliance? (Select all that apply)



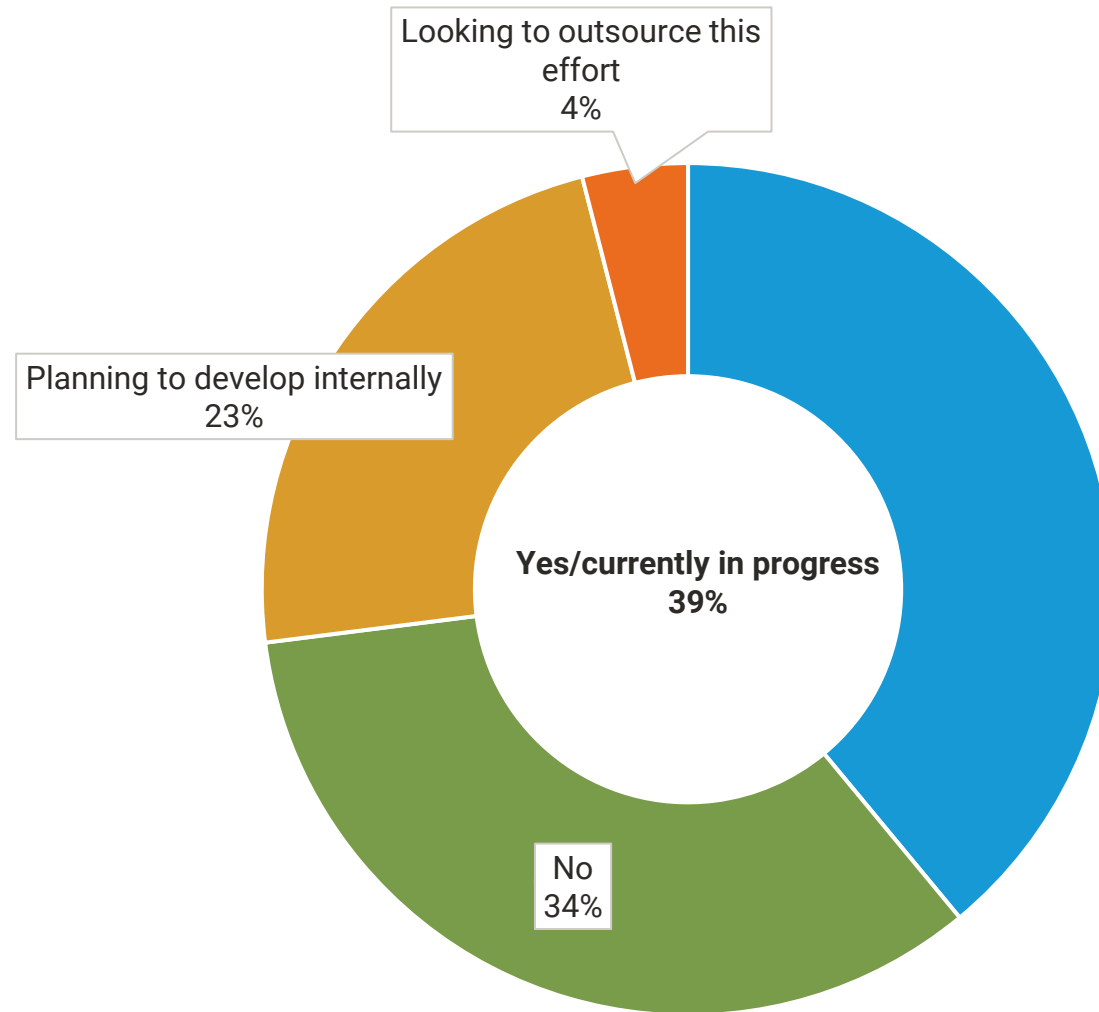
Base=56

Q103 - Is your drinking water utility prepared to manage lead service line replacements?
(Select one)



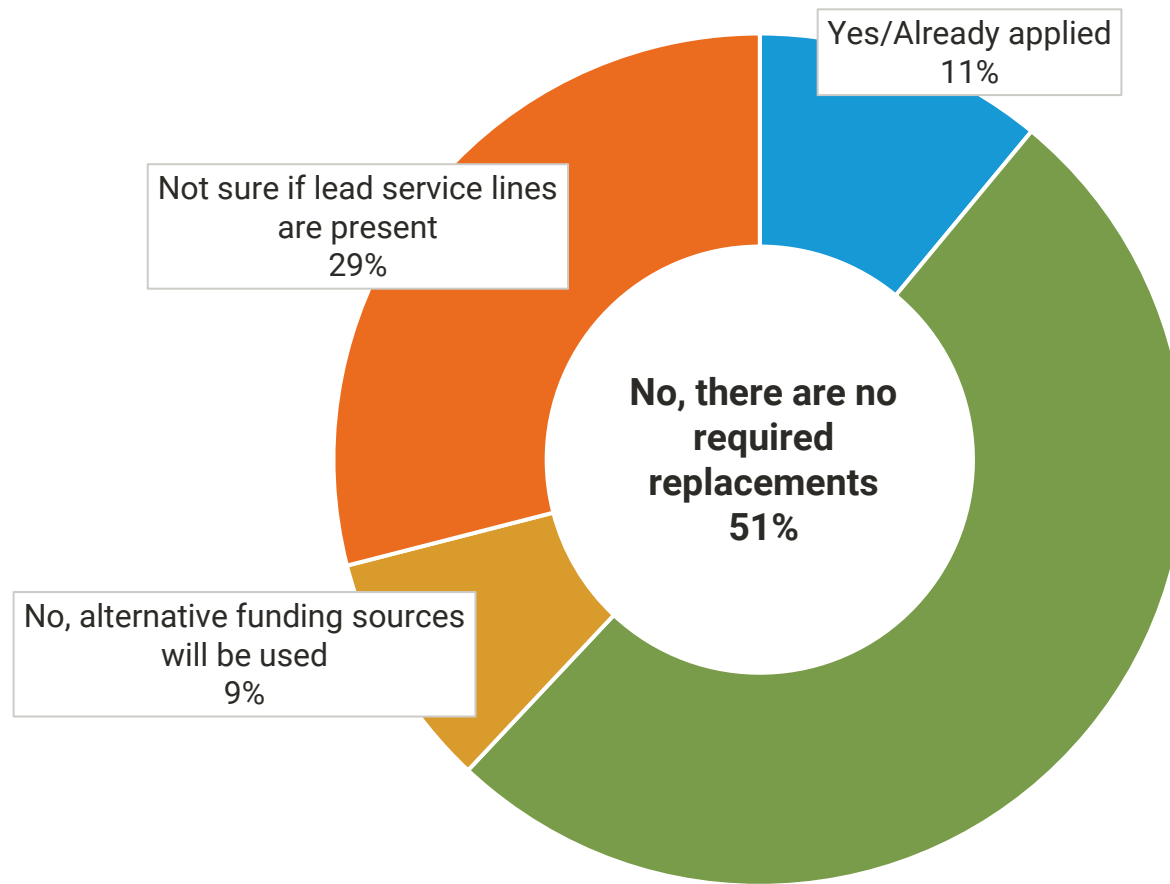
Base=56

Q104 - Does your drinking water utility have a data management/dashboard system developed to track Lead and Copper Rule Revision activities (i.e., lead sampling, service line replacements, pitcher filter deliveries, customer notifications)?



Base=56

Q105 - Do you plan to apply for Infrastructure Investments and Jobs Act (IIJA) funds to replace lead service lines? (Select one)



Base=56

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