



EU MISSIONS

ADAPTATION TO CLIMATE CHANGE

Findings from the survey on the Needs of the Mission Charter Signatories to implement climate change adaptation

Public report

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1. EXECUTIVE SUMMARY

The 308 regions and local authorities that signed the Charter of the Mission on Adaptation to Climate Change received two complementary surveys. The first (308 respondents) concentrated **on types of impacts and status** in the adaptation process¹. The second focused on the **support needed by the signatories to adapt** to climate change. Representativity of both surveys is comparable to a high degree and allows for joint interpretation of results.

Although the participation in both surveys is quantitatively different (survey 1: 308 respondents, survey 2: 186 respondents) the structure and composition of respondents is similar, both regarding participation of rural/urban communities as well as for the distribution of population classes. **Thus, the results of both surveys are comparable to a high degree and allow for joint interpretation of results.**

The findings will help **MIP4Adapt to design actions that support best the regions.**

The key conclusions from the survey are:

- Larger communities self-report higher levels of expertise and have less difficulties to cope with the challenges ahead, smaller communities need more support. Larger communities are more advanced in the adaptation process.
- Financing is clearly the dominant topic. 70% of the respondents see “major financial barriers” and a vast majority has said that “implementation” is the step where financing is a clearly limiting factor. 70% of respondents have adaptation projects in the pipeline that would depend on external funding and 80% of respondents would need assistance to apply for funding. There is also a clear relation between the need for

financial advice and the size of the community. While 90% of small respondents report needing financial advice, only 60% of large communities do. This is somehow not in line with the charter survey where 66-70% of the respondents said to have a dedicated regional budget and a dedicated team to address the challenges.

- Water management, agriculture and biodiversity are seen as the most important sectors, but significant differences between larger and smaller respondents are clearly visible.
- Step 5 “implementation”, and step 6 “monitoring progress and effectiveness” of the adaptation cycle² require the most support. Shared methodological approaches and commonly developed indicators are an opportunity for common actions for the benefit of a large number of communities.
- 55% of respondents face challenges regarding citizens and stakeholder engagement, mostly due to lack of awareness and interest. ‘Civil society’ in general has been identified as the most relevant target group. As a result, awareness raising could be the topic of a joint activity that could benefit all signatories. Type 3 of the Technical support provided by the MIP4ADAPT Team addresses this issue.
- Regarding the type of support requested, mutual learning and twinning as well as region-specific webinars and workshops are favoured by many signatories. This is particularly interesting because it accounts for the specific situation in regions. Similarities regarding size, geographical position, rural urban aspects etc. can best be accounted for in twinning approaches.

¹ https://research-and-innovation.ec.europa.eu/system/files/2023-03/ec_rtd_charter-signatories-survey-report.pdf

² For details on the adaptation cycle, please see <https://climate-adapt.eea.europa.eu/en/mission/knowledge-and-data/regional-adaptation-support-tool>

2. PREFACE AND METHODOLOGY

In the framework of the “EU Mission on Adaptation to Climate Change”³ an analysis of the information provided by 308 out of 308 signatories (cities and regions) has been published in February 2023⁴ (referred to as ‘survey 1’ or ‘charter survey’ in this report).

This report concerns the analysis of the data provided in a “survey 2” on the needs of signatories to proceed in the process of adaptation. Survey 2 has been open for contributions in March/April 2023 and received contributions from 186 signatories.

Although the participation in both surveys is quantitatively different (survey 1: 308 respondents, survey 2: 186 respondents) the structure and composition of respondents is similar, both regarding participation of rural/urban communities as well as for the distribution of large and small communities (in terms of inhabitants). Additionally, the second survey was explicitly designed to complement the first survey.

This survey yielded quantitative, half-quantitative and qualitative (in the form of free text comments) information.

The evaluation differentiates three different methods, according to the type of questions and options for the answers and to provide different perspectives on the information contained. The first concentrates on topics or choices of the respondents, the second provides a view per signatory irrespective of their size and the third weighs the results according to the number of represented citizens⁵.

There are simple questions with only one possible answer (yes/no or only one option). These are “type 1” questions. For these “type 1” questions two evaluations have been applied:

- 1) Count the numbers of signatories for each answering option.
- 2) Weighed according to the population represented by the respective signatory.

There are other questions allowing for more than one answer. These are “type 2” questions. For these “type 2” questions three evaluations have been applied:

- 1) Count the numbers of signatories for each answering option. This could lead to biased results as a signatory giving only one answer would have a lower weight in the evaluation than another who selects more than one answers.
- 2) “One signatory one vote”; To compensate for the possible bias mentioned under bullet point 1, the number of answers was used as the weight for each answer. As a result, irrespective of the number of provided answers one signatory has only one vote and the sum of weights=1 for each respondent.
- 3) Weighed according to the population represented by the respective signatory. As an additional step, after the “one signatory one vote” step, the results have been evaluated using the represented population as weight.

Almost all graphs show results for all applicable evaluation methods mentioned above. In order to have a comparable scale, all results are standardised and displayed as percentage.

Whenever the bars for the different evaluation methods in this report differ significantly, it can be assumed that results are contingent on the size of the signatory.

³ <https://climate-adapt.eea.europa.eu/en/mission>

⁴ https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/adaptation-climate-change_en

⁵ Information on other characteristics (e.g. area) of signatories were not available. Therefore, signatories can only be differentiated by their population.

3. SUMMARY

3.2 General remarks

This survey (“survey 2”) focused on the needs of signatories of the ‘EU Mission on Adaptation to Climate Change’ for support in developing, financing and implementing measures, whereas survey 1 focuses on the status of signatories in this process. The objective was to get a clearer picture of the most urgent issues and support actions to be developed to optimise and speed up the adaptation process at the regional level. The survey was structured along the 6 steps of regional adaptation⁶.

186 signatories completed the questionnaire and have been integrated in the evaluation. This sample represents approximately 91,4 Mio people⁷, 84,3 Mio in EU MS and 7,1 Mio in Non-EU countries⁸.

20% of the population of participating EU countries are represented in this survey (no responses from signatories of Czech Republic and Luxembourg)⁹.

One fifth of the respondents have a predominantly rural character, slightly less than half of them are mixed rural/urban regions and less than one third is urban. These numbers are very similar for the first (published in February 2023) and for the second survey.

Five size classes between 0 and over 1 Mio citizens were defined. The minimum number of respondents for a size class is 23 signatories the maximum is 53; an acceptably equally distributed participation across the size classes. Nevertheless, in terms of citizens represented, the size class ‘> 1 Mio’ dominates with 61% or 56 Mio of the total of 91 Mio citizens. This distribution is also very similar and thus comparable to the first survey of February 2023.

In summary of the above the sample included in this survey is representative and comparable to the former (Charter)-survey of February 2023.

Three different evaluations have been defined and applied depending on the type of questions of the questionnaire. The first counts the selected options/choices of respondents irrespective of the number of signatories or represented citizens, the second takes a signatory-oriented view and relates the first evaluation to signatories (‘1 signatory one vote’) and the third weighs the results of the second proportional to the number of represented citizens (see chapter Preface and Methodology above).

All data are based on the self-evaluation of the respondents, they are displayed as they were received, no validation has been undertaken.

⁶ <https://climate-adapt.eea.europa.eu/en/mission/knowledge-and-data/regional-adaptation-support-tool2>

⁷ Calculated with the mean value of each of the size classes (0-50 000, 50 – 100 000 etc); exact population numbers were not available, and 5 respondents did not provide data about their size.

⁸ Turkey, Norway, Iceland and Israel

⁹ The 1st survey published in February 2023 represented 308 signatories and a population of app. 143 Mio people.

3.3 Basic Data

186 signatories of 29 countries (25 EU-MS) have sent filled questionnaires, they are called 'respondents' in this report. There is a big variation of participation between countries (see Figure 1) and representativity differs significantly between the countries. Figure 2 shows these data; 1) the number of inhabitants represented in this survey per country and 2) their share in the total population of the country.

Respondents from Spain, France, Italy, Portugal and Poland represent the largest absolute numbers of represented citizens.

In Iceland, Portugal and Denmark respondents represent more than 70% of their countries' total population. For 12 other countries more than 20% (but less than 50%) of the countries' population is represented by the respondents and for the others the representativity falls below 20%. For some larger countries it is still satisfactory with 17% (France, Poland) but for some other larger countries like Bulgaria, Romania and Germany it is very low (2%-6%).

All evaluations made in this report may be biased by the described imbalanced participation.

3.4 Results

Signatories were asked to estimate their level of expertise in the area of climate change adaptation. On a scale from 1 (very low) to 5 (very high) the average score was 3.4 between medium and high expertise (see Figure 3). The level of expertise depends on the size of the signatories. **Larger signatories (in terms of represented population) say to have significantly higher expertise** (see Figure 4), which could be explained by larger administration with a higher amount of staff, allowing for more specialised staff.

Water management, agriculture, ecosystems and biodiversity are the most important socio-economic sectors for climate change adaptation. Further details are given in Figure 5. Figure 5 and Figure 6 also show that **the importance of certain socio-economic sectors depends clearly on the size of the respondents**.

Question 2.2 focused on the need for support in the different steps of the adaptation process. **Implementation and monitoring** followed by Stakeholder engagement evolved to be the crucial issues at the moment (see Figure 8). This indicates that many signatories are quite advanced in the process. Question 3.1.3 confirms this result. 61% of the respondents said they would need support for implementing measures (Figure 16)¹⁰.

70% of the respondents experience major financial barriers in the adaptation process (Figure 9). These financial barriers are dominant especially during the implementation phase (Figure 10). **72% of signatories, representing 73% of the citizens have projects in the pipeline that depend on external funding** (Figure 11) and 79% of those would need technical assistance to apply for and access funding (Figure 12).

¹⁰ Although there is a difference; in question 2.2 22% said to need 'technical support' for implementation and in question 3.1.3 61% say to need support for implementing measures. Whether the difference between 'technical support' and 'support' in general can explain this difference remains unclear. Probably this

difference can be explained 'psychologically' as in question 2.2 signatories had 8 different topics for 'technical support' to select and in question they were just asked whether they would need 'support' for implementation in general.

In the frame of question 3 **information and knowledge needs** were addressed. With a sector specific perspective **information for possible/advisable measures is primarily needed for water management, agriculture and biodiversity** followed by energy, health and buildings (Figure 14). The answers resemble very much those to question 2.1 (Figure 5).

There is **no clear answer to the question for the most appropriate method to select and evaluate adaptation options**. Most of the respondents have selected many of the proposed methods, in average 3,7 out of 7 methods. This indicates uncertainty and/or that the tasks are very diverse and therefore no method fits all needs. However, 'cost benefit analysis' has been identified as the most important approach (Figure 15).

96% of the signatories need support to monitor and evaluate adaptation efforts. There is no clear differentiation between monitoring 'effectiveness of measures' and monitoring 'progress in adaptation'. Main conclusion of this question is **that only 4% believe they do not need any support in monitoring**.

Concerning **stakeholder and citizens engagement, 56% of the signatories face challenges** in engaging with citizens (see Figure 19) in general. When they were asked which groups of citizens or which sectors are important

for stakeholder and citizens engagement, most signatories **selected 'civil society' as being most important, and thereof younger people being more important than elderly**. Consequently also 'Education' has been ranked high. Business and SMEs is also ranked high especially by smaller signatories and not so much by larger ones (see Figure 18), the contrary is true for the health sector. Again, the answers show in some respect a significant difference between the views of smaller and larger signatories.

In question 4.1, again, **technical support on funding implementation measures** dominates (26%)¹¹. All other options (on technical support for planning, assessment of risks, citizens/stakeholder engagement, helpdesk) are supported by around 15 % of the signatories (see Figure 20).

Concerning 'other supporting activities' **specific actions - benefitting from regional or topic related similarities - are prioritised somehow** (see question 4.2 and Figure 21). But the picture is not so clear as most of the signatories have selected all possible options, what indicates either decision uncertainty or a broad variation of tasks that simply cannot be addressed with one or two approaches only¹²

11 The results confirm the answers to questions 2.3, 2.3.2 and 2.3.3. For details see chapter 4.4.1.

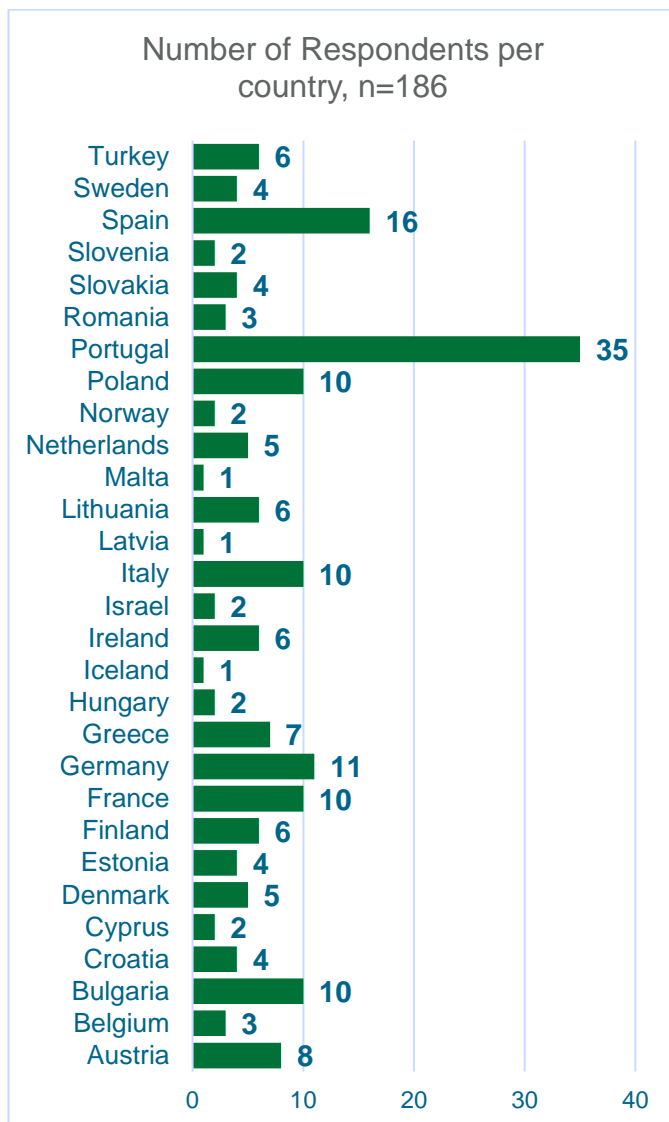
12 Discussion on this see chapter 4.4.2.

4. EVALUATION AND DISCUSSION OF SURVEY RESULTS

4.1 Identification of the Region

4.1.1 Where are you located?

Signatories of 29 countries – 4 of them Non-EU¹³ - participated in the survey. There are no respondents from Czech Republic and Luxembourg. The number of returned questionnaires per country ranges between 32 and 1. These data are displayed in the figure below.



¹³ Turkey, Norway, Israel and Iceland

Figure 1: Participation of respondents per country (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 1.3)

The data of the figure above do not say anything about the number of represented citizens and nothing about representativity for the respective country. Therefore, in the next figure the number of represented citizens and their share of the total population of the countries is given.

In absolute numbers of represented inhabitants Spain (16 Mio), France (11 Mio), Italy (10 Mio), Portugal (8 Mio) and Poland (7 Mio) are on top of this ranking. In relative numbers (percentage of the represented inhabitants/total population of the country) the coverage of the survey ranges from 2% to 90%. Among EU-MS the coverage is satisfactory especially for some of those countries that expect to be most affected by climate change/drought (e.g. Portugal, Spain, Croatia, France, Greece)¹⁴.

Figure 1 and Figure 2 show that there are different perspectives on representativity. Due to the heterogenous structure of responsible institutions, it is impossible to have only one definitive view on representativity. Therefore, interpretation of the results needs sometimes to differentiate between a general and summarising view and detailed results for different groups of signatories (e.g. represented population, geographical distribution, etc.).

¹⁴ N=181 instead of 186 because for some of the signatories not data on population where available

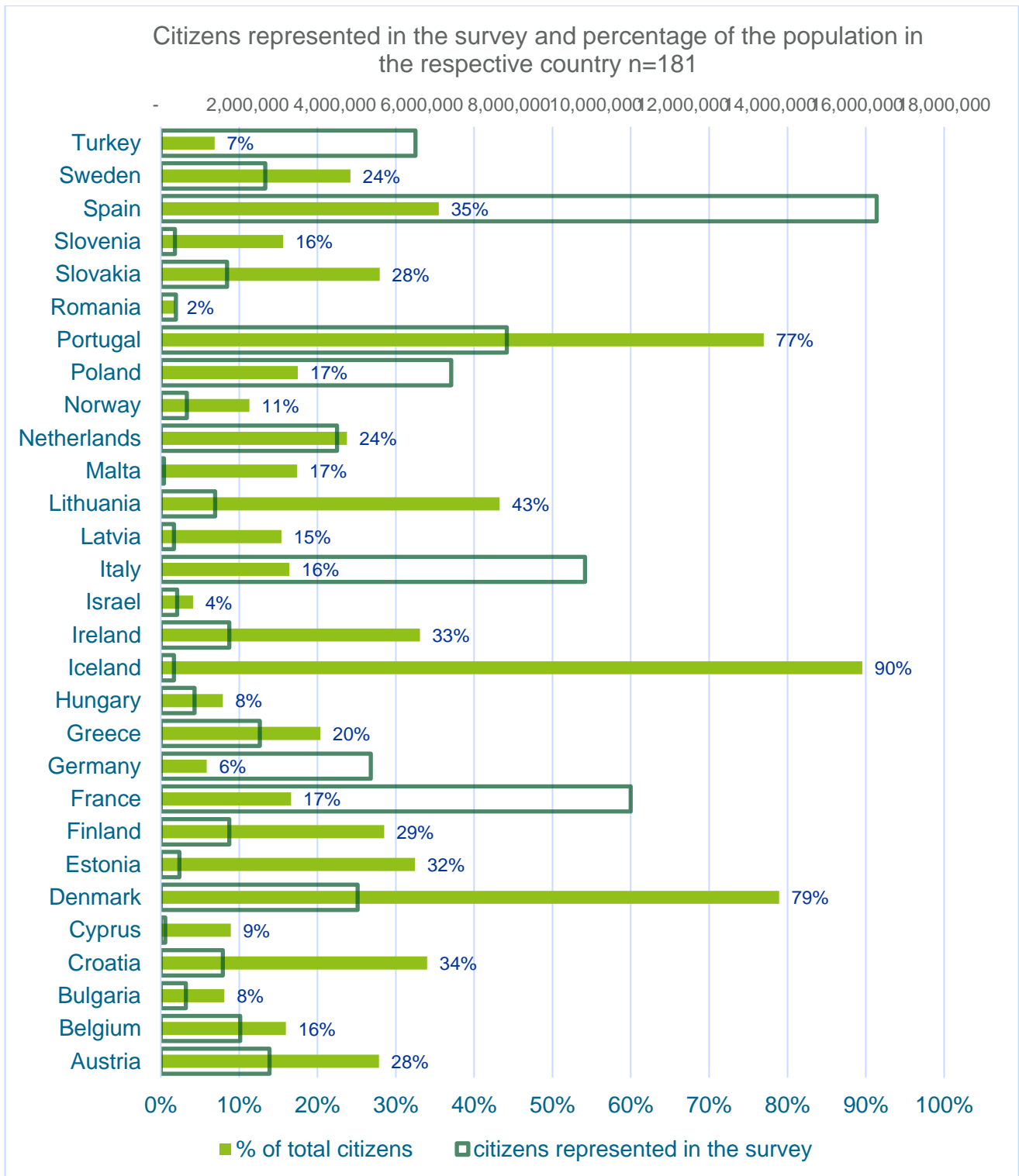


Figure 2: Number of represented inhabitants per country and share of the total population of the respective country. (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 1.3)

4.1.2 How would you rate your level of expertise in the area of Climate Change Adaptation?

Most of the signatories say their level of expertise in adaptation is medium to high, with a tendency that smaller signatories have rather medium expertise (49%) and larger ones tend to say they have high (40%) competence¹⁵. The level of expertise depends to a certain extent also on the size of the signatory. One explanation could be that larger administrations have more staff and more differentiated organisational structures allowing for more specialised staff.

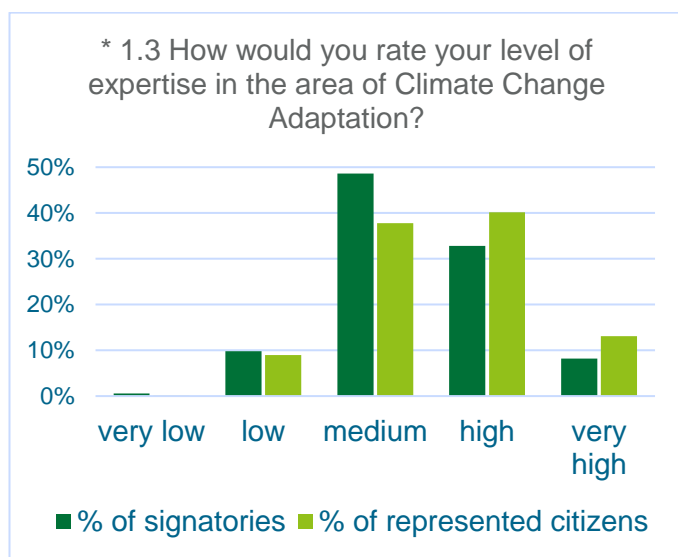


Figure 3: Level of expertise in climate change adaptation. (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 1.3)

Although this tendency is already cognisable in the figure above, the following Figure 4 gives a clearer picture since it focuses only on the relationship between size class of the signatory and the average level of expertise in climate change adaptation. This view on the data confirms the interpretation of the figure above.

A continuous and significant increase of the level of expertise from an average value of 3,2 for small signatories up to 3,7 for those representing more than 1 Mio citizens is the result of this self evaluation of signatories.

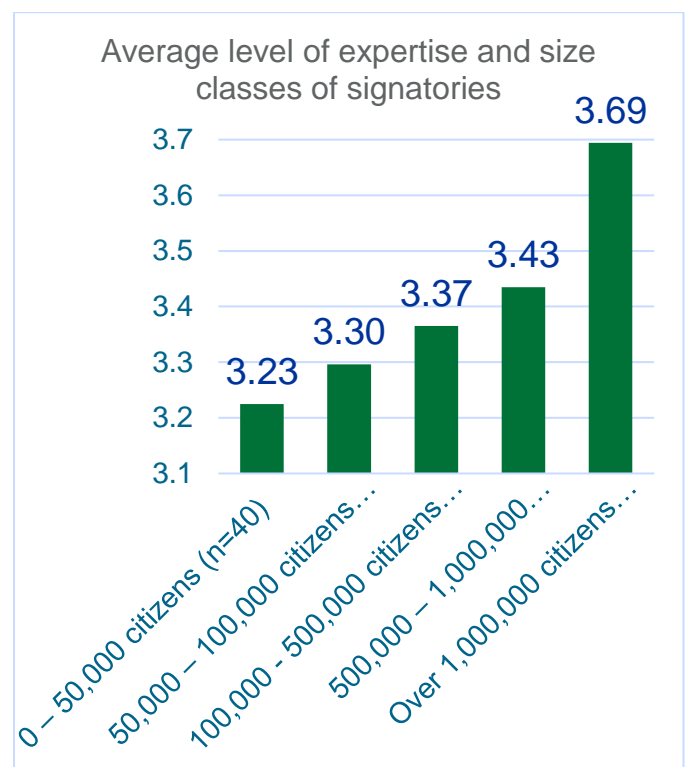


Figure 4: Level of expertise in climate change adaptation and size classes of signatories. The larger a signatory is the higher the expertise (self-assessment). (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 1.3)

¹⁵ This tendency results from comparing the blue bars for “% of signatories” with the orange bars for “% of represented citizens”.

4.2 Current status of adaptation in the region

4.2.1 Which socio-economic sectors are most relevant to climate adaptation in your region?

Many respondents selected more than three (allowed) options/sectors and others selected only one. Counting only the number of clicks for each socio-economic sector would give biased results. This results from the fact that a signatory selecting 10 different sectors would have a 5 times higher weight compared to another signatory that selected only two socio-economic sectors.

In concrete terms this means that only two thirds (66%) of the signatories selected only the allowed number of 3 sectors, 13% selected more than 3 and up to 6 sectors, 12% selected up to 9 sectors and another 9% of signatories selected more than 9 sectors.

To take this into account and provide different perspectives of the numbers, this question was evaluated with three different methods, as indicated in the Preface/Methodology.

“clicks per sector” in the graph below shows the results if multiple selections are not taken into account, “1 vote/signatory (compensated for multiple selection)” eliminates this bias. Finally,

in order to take the size/population of a signatory into account, the number of represented citizens has been included in the evaluation (“% of represented citizens”).

To display all different evaluations in one comparative graph, all three evaluations have been standardised and are given as percentage.

In total “water management”, “agriculture” and “biodiversity are seen as the most important issues, while “banking and insurance”, “digital sector” and “fisheries” are less relevant in the eyes of the respondents.

To give an example, the graph can be read as follows. For instance, “water management” seems to be important for large signatories, therefore the grey bar is larger than the others. The same tendency is obvious for “coastal areas”, “health” and “agriculture”. The contrary is true for “building/construction”. This indicates that the perception of the upcoming challenges differs between larger and smaller signatories, but the ranking between water management, agriculture and biodiversity stays the same for all three perspectives.

Among the two signatories who answered ‘other sector’, one states that all sectors are connected in many ways and therefore it is difficult to choose, the other asks for ‘municipal (economy household sector’.

2.1 Which socio-economic sectors are most relevant to climate adaptation in your region (Please select a maximum of three)?

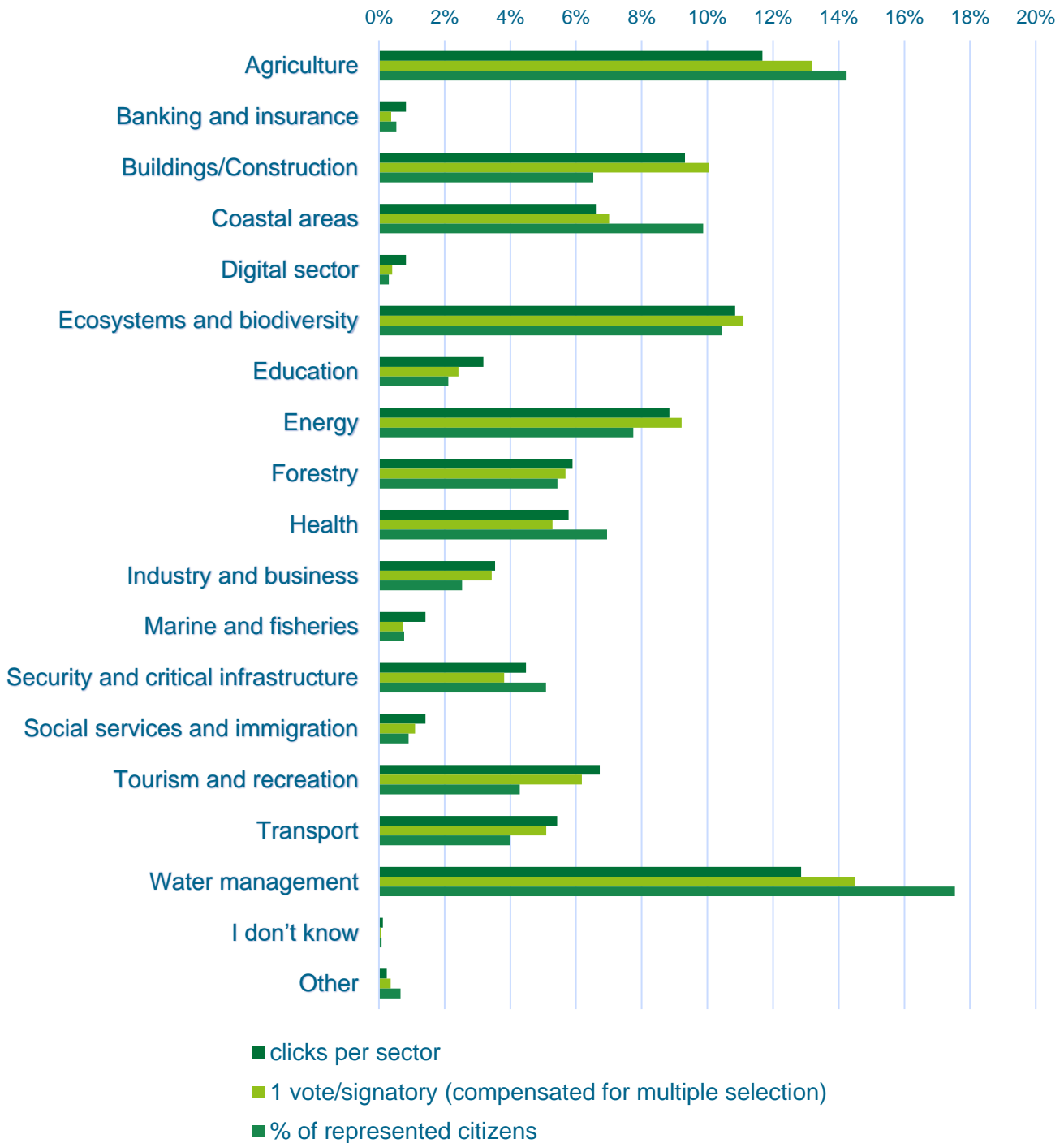


Figure 5: Relevant socio-economic sectors in the context of climate change adaptation (three different views at the data, see chapter Fehler! Verweisquelle konnte nicht gefunden werden.). (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 2.1)

To illustrate the reasons that lead to the difference in the bars for water management in the figure above, the following figure is provided. It extracts and focuses on the data for the relevance of water management and displays them for each size class of signatories.

Two indicators are displayed in the figure below,

A) **% of signatories** (number of regions, cities, agglomerations, entities) in the relevant size class that selected water management as relevant

B) same as A but expressed as **number of citizens**.

The figure below exemplifies that the perception of challenges and issues depends sometimes very significantly on the size of signatories.

This example shows that the three different evaluation methods that are used for the evaluation of this survey provide different perspectives on the results and need to be interpreted accordingly.

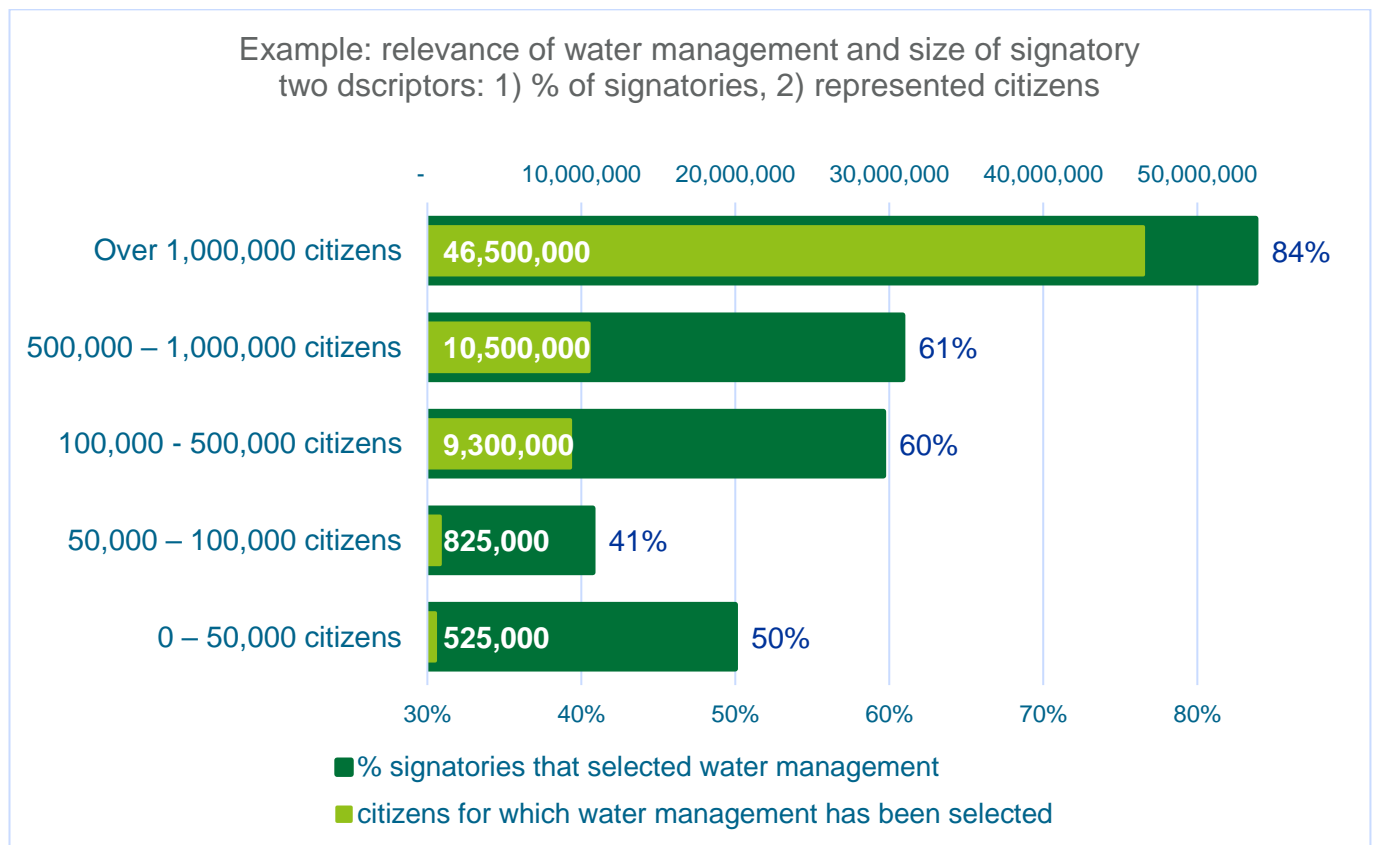


Figure 6: Large and small signatories have different views on the relevant socio-economic sectors. 84% of large signatories (>1Mio) representing 46,5Mio people consider water management as a relevant sector but only 41% of signatories with 50-100 000 inhabitants (representing 825 000 people) share this view. (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 2.1)

Four Signatories made comments, 2 of them concerned funding and financing, one of them to identify better funding opportunities as well as support for better project design identification and preparation of calls. Another suggestion concerned to benefit from digitisation for twinning as far as possible.

4.2.2 In the Charter survey, you were asked to identify which steps of the climate adaptation cycle you have already undertaken. In order to further identify your needs to keep advancing throughout the process, could you please further specify which of the following steps you would need technical support for (more than one answer is possible)?

As this survey is oriented towards support demands, signatories were not asked where they currently are but for which steps, they would need technical support ¹⁶. The evaluation of this question is given in the figure below. Obviously support for “Preparing the Ground for Adaptation” is the least important issue (most have already completed this step), while “Implementing adaptation measures” and “Monitoring and evaluation implemented measures” are of primary importance.

These results indicate where in the adaptation process signatories currently are. It is to some extent consistent also with the results of the 1st survey (the charter survey) where 81% of the signatories say to have finalised an adaptation strategy. Thus “implementation” and “monitoring” are the next logical steps and this is reflected in the results of this survey.

For the first steps in the adaptation process action has already been taken and the needs for technical support are centred around subsequent steps in the process, such as the implementation phase and on evaluating the efficiency and effectiveness of measures. These priorities are displayed in Figure 7 (absolute numbers) and Figure 8 (relative numbers).

In addition, out of the relation between the different evaluation methods, there is a tendency that larger signatories are more advanced in the adaptation process (see the grey bars in Figure 8 for monitoring and stakeholder involvement).

¹⁶ The evaluation method is the same as described in the chapter above for Question 2.1.

2.2 In the Charter survey, you were asked to identify which steps of the climate adaptation cycle you have already undertaken. **In order to further identify your needs, could you please further specify which of the following steps you would need technical**

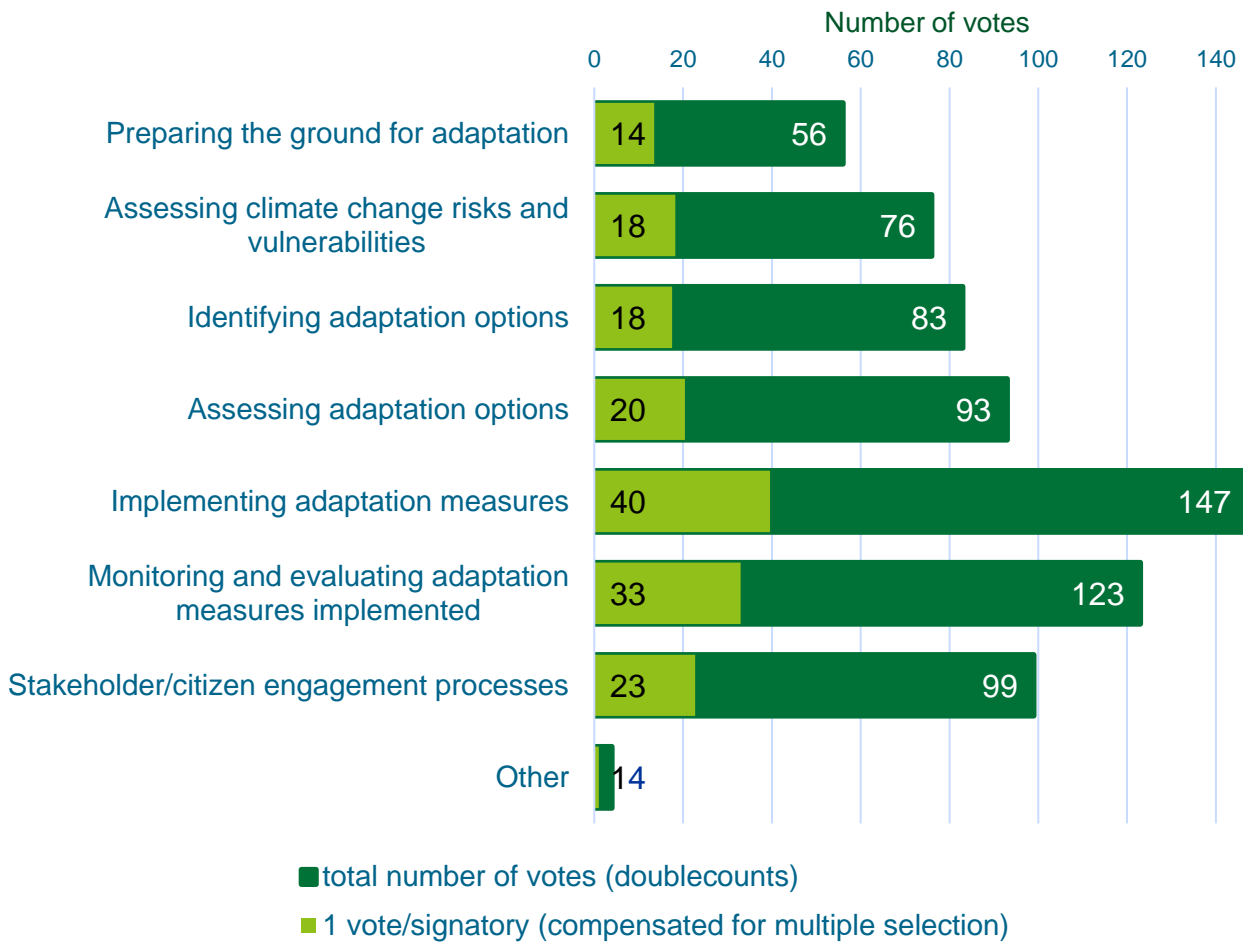


Figure 7: Survey of support needs to proceed through the different steps of the of the climate change adaptation process -absolute number of votes for the respective topic and compensated for multiple selection (1 vote/signatory). (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 2.2)

2.2 In the Charter survey, you were asked to identify which steps of the climate adaptation cycle you have already undertaken. **In order to further identify your needs, could you please further specify which of the following steps you would need technical**

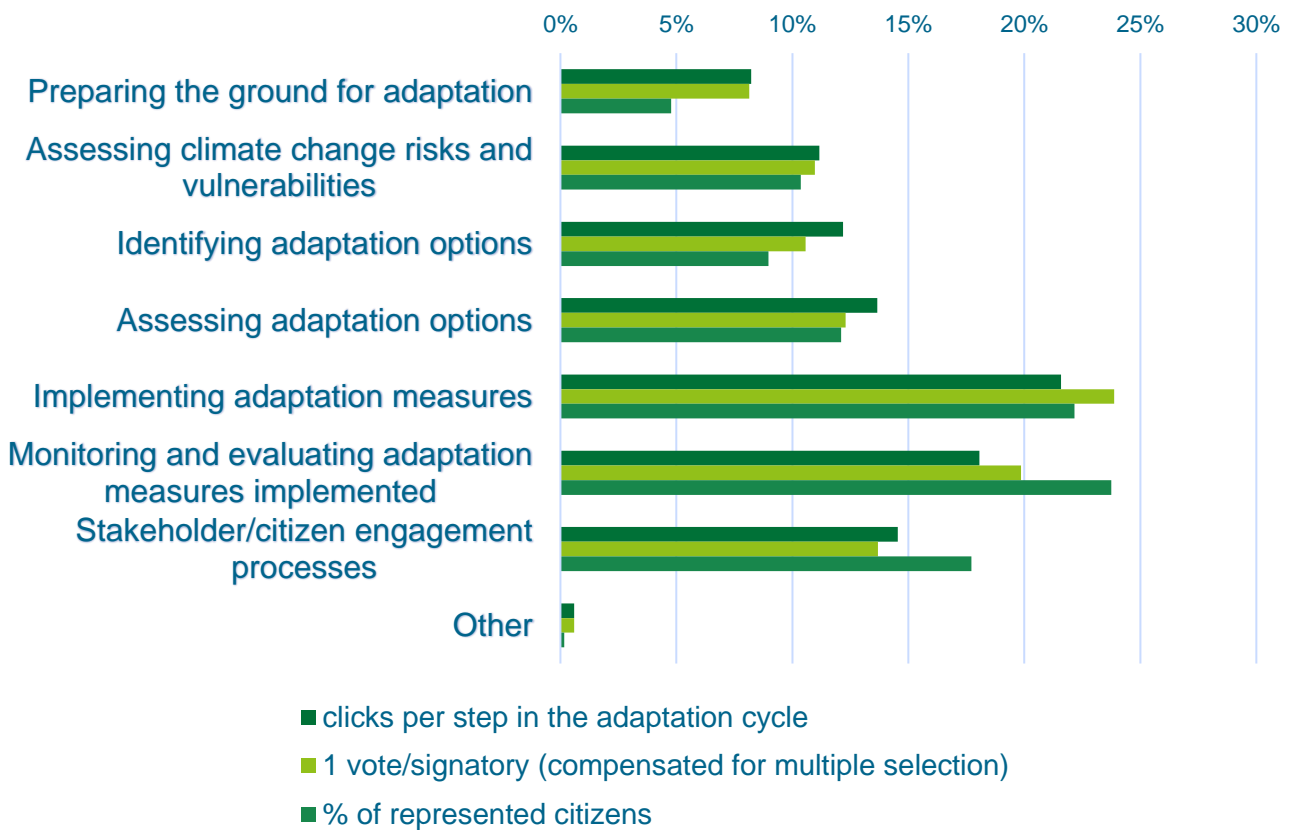


Figure 8: Survey of support needs to proceed through the different steps of the of the climate change adaptation process. (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 2.2)

4.2.3 Are you experiencing major financial barriers to climate adaptation in any or all sectors in the region?

This question is not meant as a leading question but to provide a quantification of the importance of financing issues. The figure below shows, approximately two thirds of the signatories see “major financial barriers”. Also, here there is a slight tendency that larger signatories see fewer financial barriers.

In the first, the charter survey 93% of the respondents see “challenges” regarding the financial resources, while 61% said to need “financial advice”. On the other hand, in the charter survey 66% of the respondents said to have a dedicated regional budget for “implementation of adaptation measures”. This seems to be a contradiction and need to be assessed further.

In both surveys the urgency of financing issues is more or less the same for urban, rural, large or small communities.

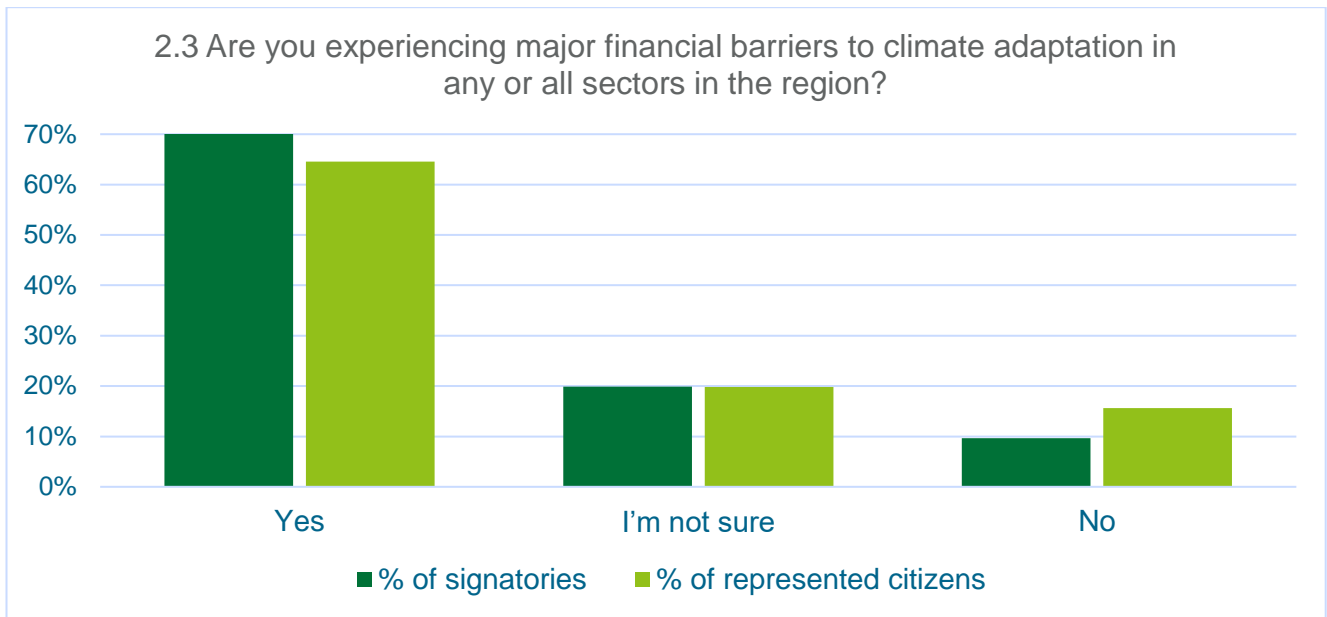


Figure 9: Results of the ballot regarding financial barriers. (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 2.3)

4.2.3.1 If funding is an issue, in which specific phase of the adaptation cycle is the lack of funding particularly limiting to you?

As this question is addressed to those that see funding as an issue (see question 2.3), only 131 out of 186 signatories have answered this question.

There is a dominant financing need for implementation measures. 39% of the respondents have confirmed that financing of implementation measures is a key issue, while for all other steps of the adaptation process less than 16% of the respondents see a financing issue (see figure below). This is by far more differentiated than concerning the “need for technical support” for the different steps of the adaptation process (see question 2.2).

In most of the cases “implementation” is also the most cost-intensive step in the adaptation process. Therefore, it is also trivial that implementation is confronted with the biggest financial barriers.

2.3.1 If funding is an issue, in which specific phase of the adaptation cycle is the lack of funding particularly limiting to you? (more than one answer is possible)

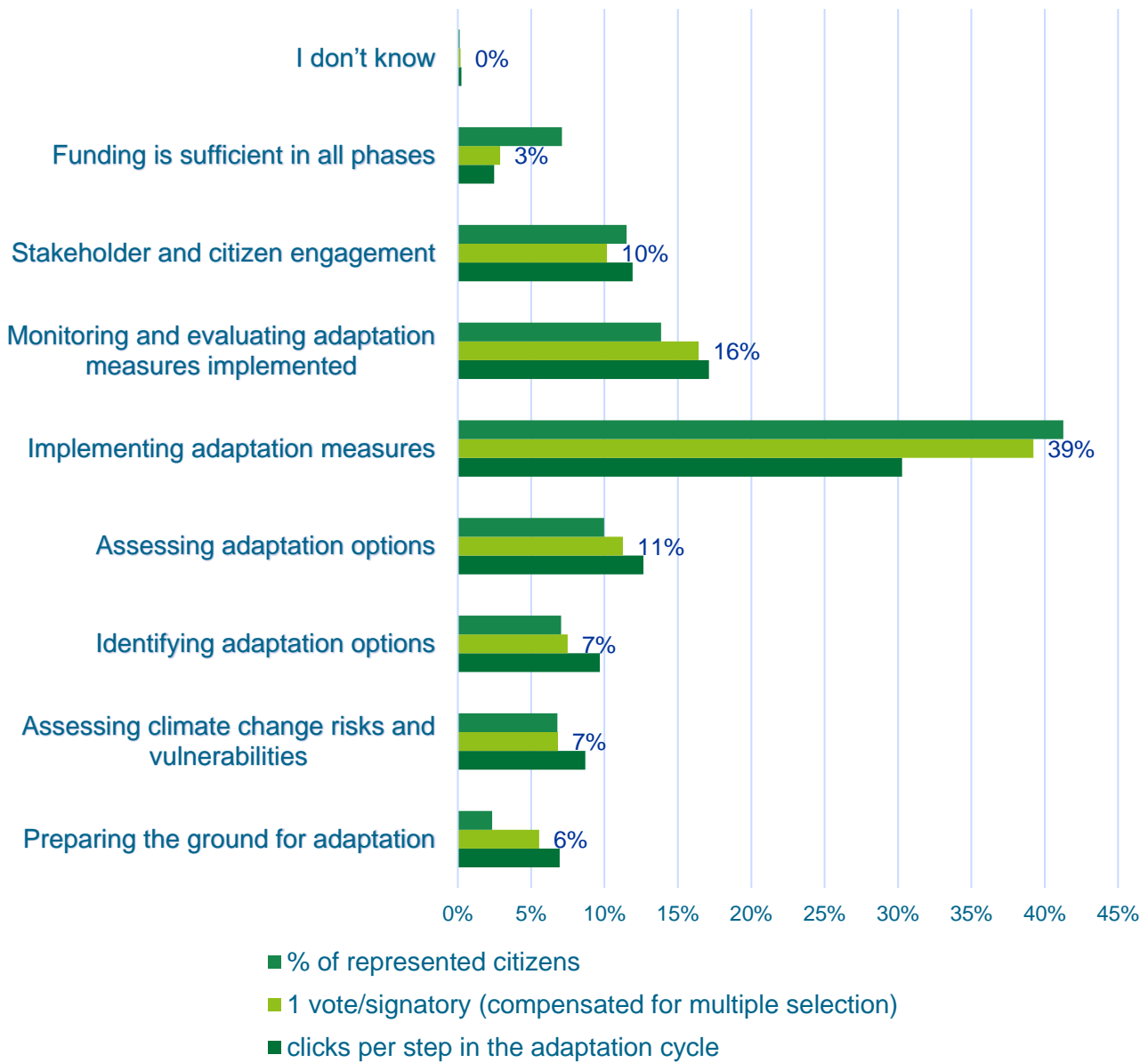


Figure 10: Identification of steps in the climate adaptation process where financing is a limiting factor. (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 2.3.1)

4.2.3.2 Do you have any specific adaptation projects identified that would depend on external funding for implementation?

180 signatories answered this question. Out of them more than 70%, both in terms of respondents as well as in terms of represented citizens, have projects in the pipeline that depend on external funding. This is a strong indicator for the need to support progress in the adaptation process through solving the funding issue.

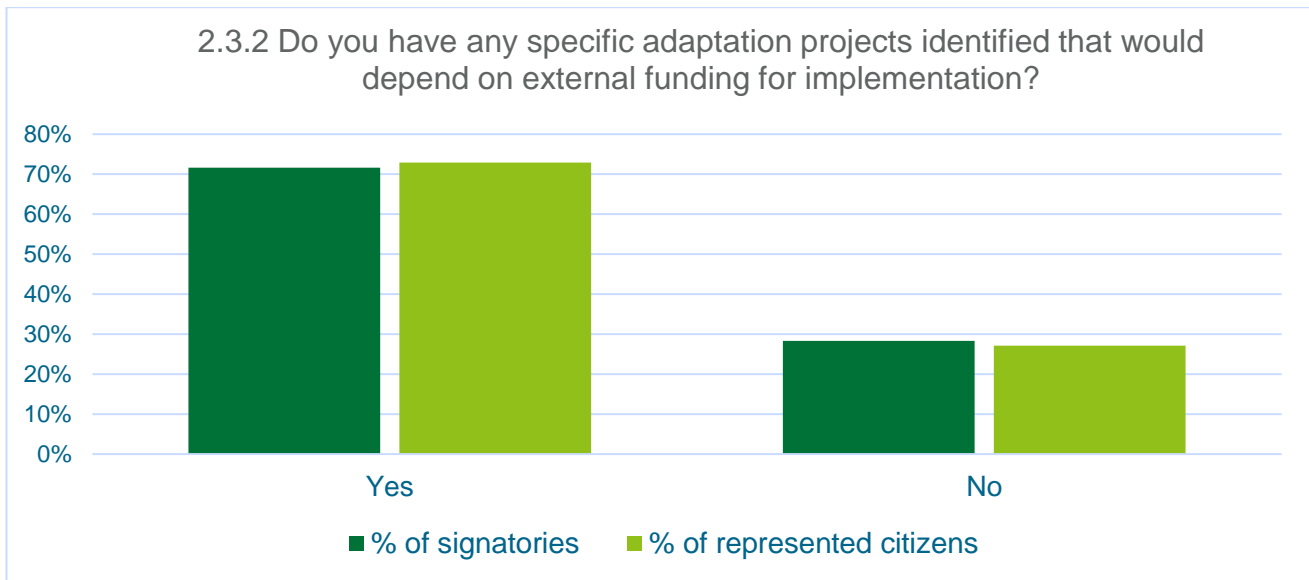


Figure 11: Assessment of the need for external funding to implement projects of the climate adaptation process. (Source of the graph: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 2.3.2)

4.2.3.3 If yes (see question 4.2.3.2), do you have a need for technical assistance in order to be able to identify and apply for funding opportunities?

130 signatories have answered this question (only those that identified a need for external funding of adaptation projects). Out of these 130 respondents almost 80% (representing two thirds of the represented citizens) would need technical assistance to apply for funding. The clear difference between the number of signatories (79%) and the citizens represented by these signatories (66%)¹⁷ indicates that predominantly smaller regions/cities have a need for technical support in funding. This is in line with the interpretation of question 2.3 (see above) but slightly different from or not in line with the

numbers of the charter survey, where 69% of urban signatories and only 61% of rural signatories said to need financial advice.

Figure 15 provides more detail on this topic. It shows the relation between the size of the signatory and their need for technical assistance or financial advice. Increasing sizes of signatories go along with less need for financial advice and vice-versa smaller signatories need more financial advice.

The numbers show that supporting signatories in their choice of funding opportunities is a crucial issue especially for smaller signatories with less resources and specialised staff. Other initiatives similar to the EU Mission on Adaptation to Climate Change have considered establishing a “finance guide” useful to foster transparency and accessibility of existing funds.

¹⁷ In the charter survey 61% of the respondents said to need “financial advice”.

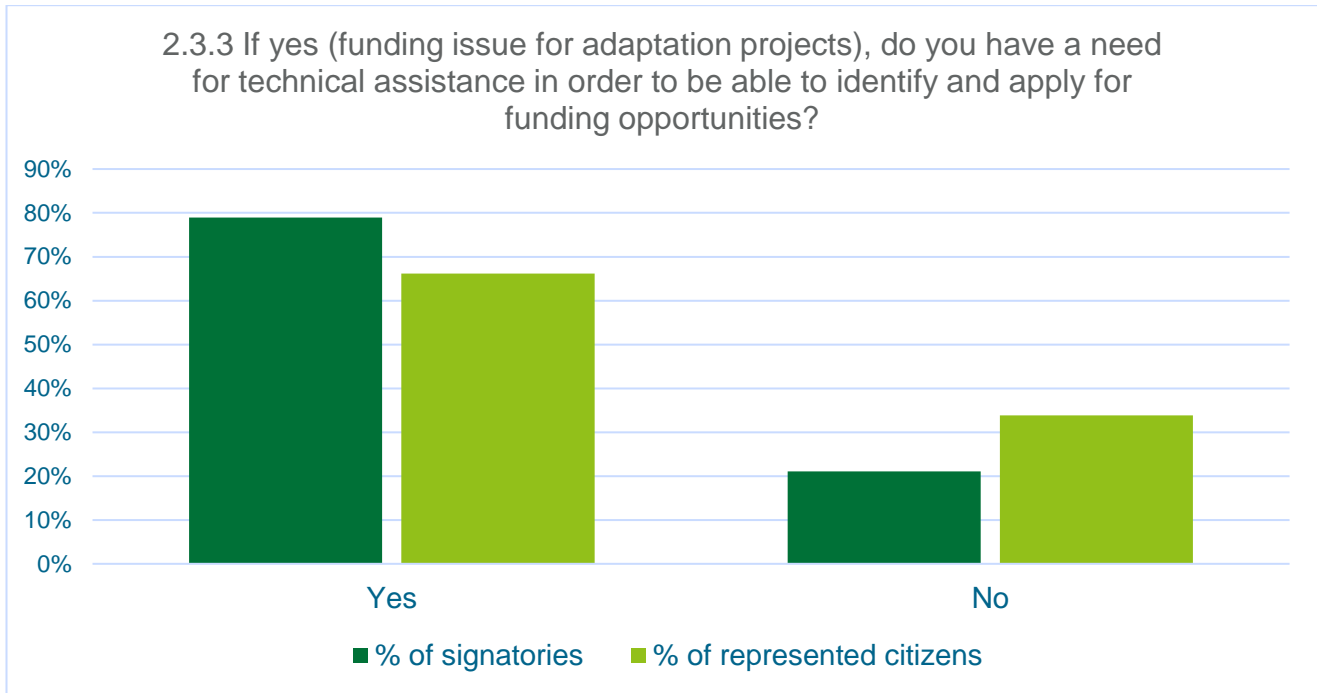


Figure 12: Assessment of the demand for support in identifying and accessing funding opportunities (for projects that are already in the pipeline). (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 2.3.3)

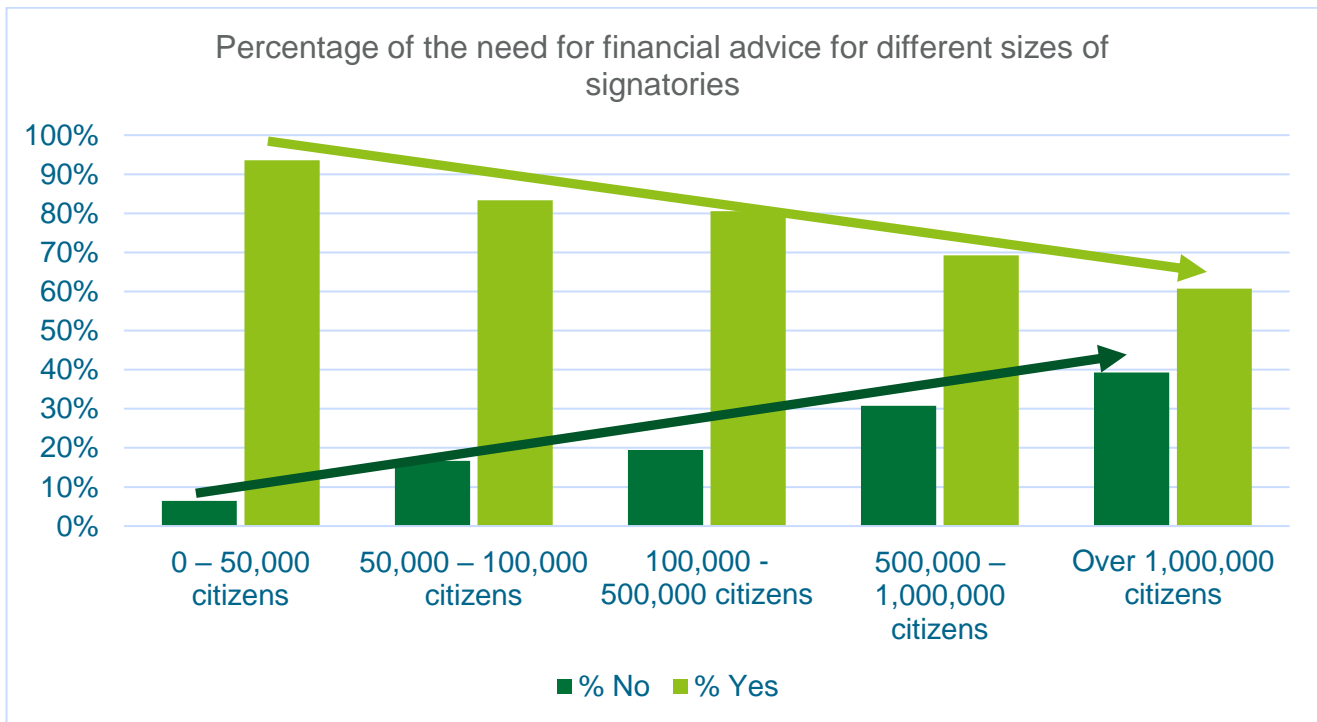


Figure 13: Assessment of the demand for support in identifying and accessing funding opportunities (for projects that are already in the pipeline). (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet Pivot 2.3.3)

4.3 Information and Knowledge Needs

4.3.1 Adaptation Measures

4.3.1.1 For which sector are you lacking information on possible / advisable adaptation measures?

The answers to this question (on sector-specific information needs for adaptation measures, (more than one answer is possible)) are very

similar to the answers for question 2.1. (on the importance of socio-economic sectors for adaptation).

Information about measures for water management, agriculture and biodiversity followed by energy, health and buildings are the dominant issues. Similar to the answers to question 2.1 there are sometimes significant differences between the different evaluation methods (e.g. building, banking, education) indicating that challenges may be different for smaller/larger or rural/urban communities.

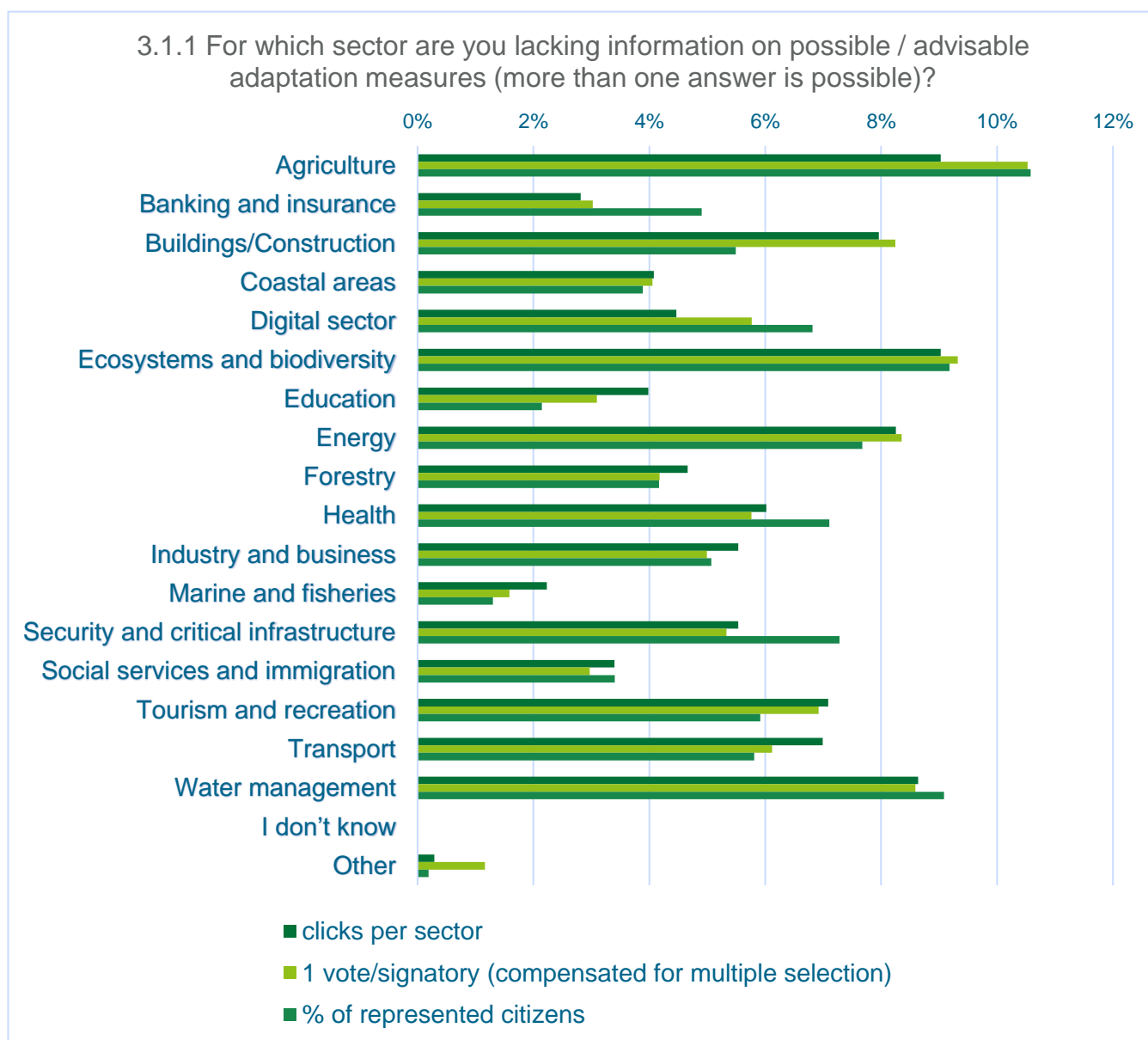


Figure 14: Sector specific information needs to identify/design/select appropriate adaptation measures. (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 3.1.1)

Three signatories selected 'other' but two of them had no suggestion and one mentioned integrated urban planning for enough green urban space.

4.3.1.2 Which methods to evaluate adaptation options would be the most useful to you?

Cost benefit analysis to evaluate and select adaptation options has frequently been selected as most useful for signatories. 4 other proposed methods have been selected by signatories representing 12%-17% of the citizens.

There is not a very clear preference among the signatories and there are no significant differences between the 3 different bars in the figure below. Only for the cost benefit analysis there is a weak trend towards signatories representing larger communities.

Apparently, the most appropriate method to evaluate adaptation options depends also on a number of conditions and factors of the issue under consideration, on the type of challenge etc. Considering that and looking at the answers to this question it seems that signatories had difficulties to make a clear selection. This can also be supported by the fact that in average each signatory has selected more than half of the available options (3.7 out of 7 possible options). This expresses a sort of decision uncertainty of respondents due to the large variety of challenges to be addressed by evaluation of adaptation options.

It might be concluded that specific action to reduce this decision uncertainty concerning appropriate evaluation methods would be worthwhile.

3.1.2 Which methods to evaluate adaptation options would be the most useful to you (more than one answer is possible)?

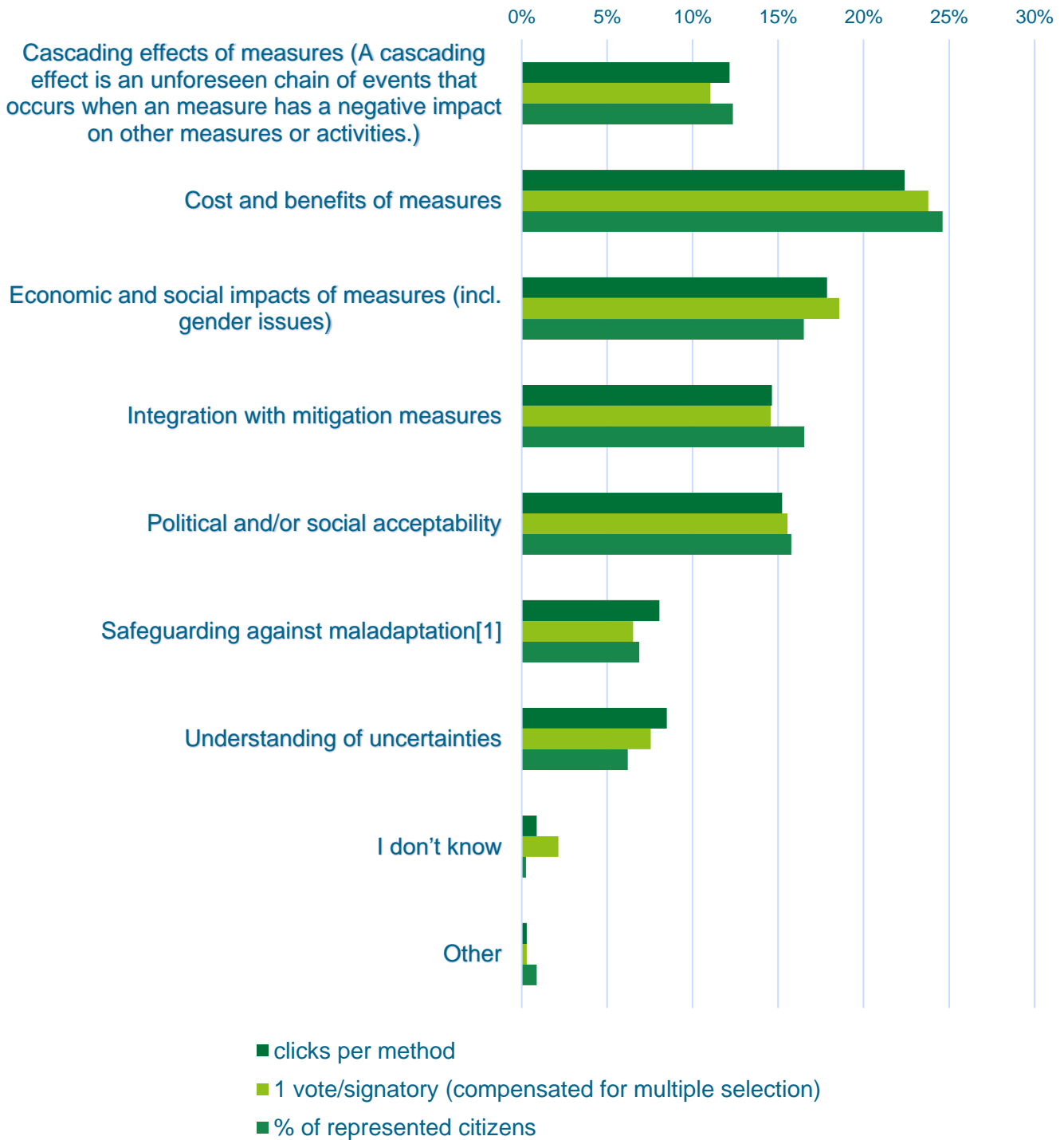


Figure 15: Prioritisation of methods to select appropriate adaptation measures. (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 3.1.2)

Two free text comments were made under the option 'other' of this question, one concerned to evaluate based on the cost of inaction and the other asked for greater effectiveness in reducing risk.

4.3.1.3 Do you need support for implementing measures?

Although the question is quite general the clear answers underline, a majority of signatories

(61%) needs support for implementing measures. Again, large communities need slightly less support than smaller ones.

Answers this question can also be understood as a validation of the answers to questions 2.2. (steps in the adaptation process where support would be needed) and 2.3.1 (steps in the adaptation process where funding is a limiting factor).

Implementation of measures is among the different adaptation steps the dominant issue in the process according to this survey. Questions 2.2 (need for technical support) and 2.3.1 (lack of funding) have addressed different aspects of implementation and the results are very similar. So, this question can be seen as the summary, plausibility check and thus confirmation of the answers to questions 2.2 and 2.3.1.

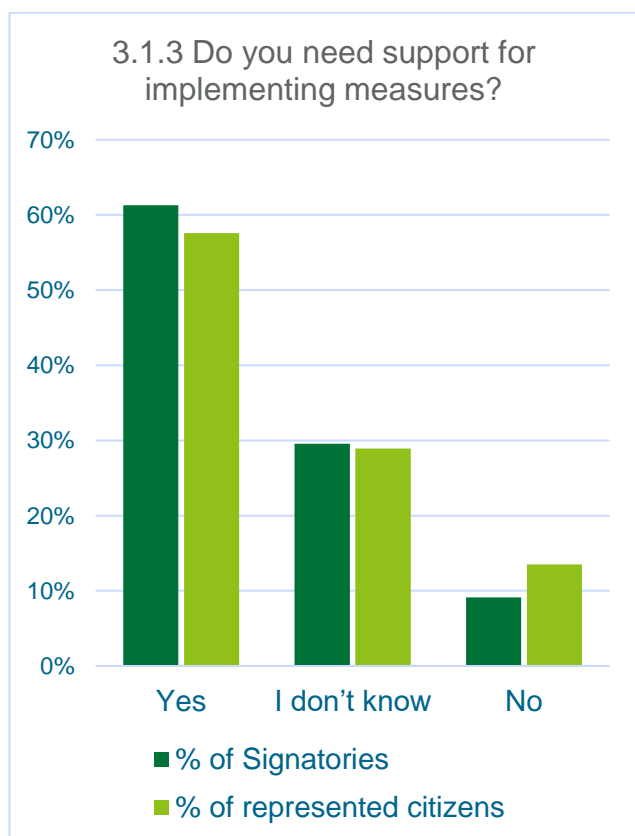


Figure 16: Assessment of the need for support for implementing measures. (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 3.1.3)

4.3.1.4 Which support do you need for implementing measures? Please note the mission support cannot solve legal issues related to the Member States level.

102 signatories provided contributions to this question.

Financing is clearly the dominant topic (73 of 102 comments mentioned financing in one way or another).

Other topics were methods and approaches to select best measures (16 statements), twinning and sharing of good practise (14 statements). Stakeholder involvement, political and administrative aspects and Monitoring were mentioned several times.

Other statements mentioned topics like (human) resource mobilisation adaptation/mitigation nexus and the need for the harmonisation of indicators.

4.3.2 Monitoring and evaluation

4.3.2.1 Would you need support to monitor and evaluate your adaptation efforts in any of the following aspects?

This question asks whether support is rather needed for developing monitoring of the “effectiveness of measures” or of the “progress in adaptation”.

48% of signatories rather (signatories had to decide for one option, multiple choices were not admissible) need support in monitoring efficiency of measures and 40% need support in monitoring progress in adaptation. In terms of represented citizens this ratio is balanced; 46.4%/46.5%. This leads to the conclusion that larger signatories say they primarily need support in “monitoring progress” and smaller ones need support in “monitoring effectiveness”. Currently there is no plausible explanation for this difference it might

also be random since the two topics are not directly comparable or not sufficiently defined.

However, only 4% of the signatories do not need any support in developing indicators and

monitoring. Considering the importance of comparability of monitoring results across the EU there would be an opportunity to provide this monitoring support based on harmonised methodologies.

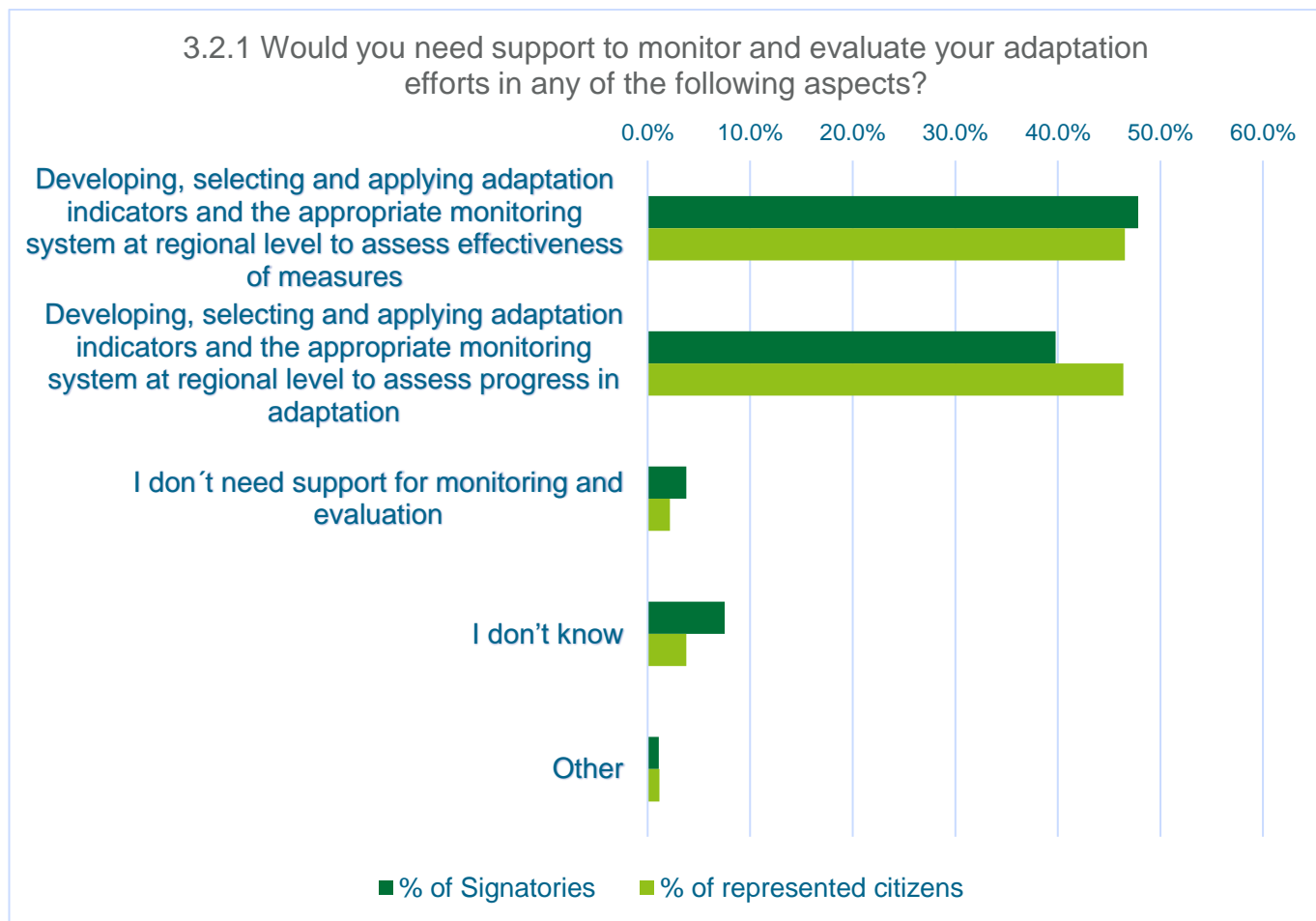


Figure 17: Priorities in monitoring and evaluation of different aspects of the adaptation process. (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 3.2.1)

Two comments were provided for this question. Both emphasised the importance of monitoring the adaptation process and the development of indicators.

4.3.3 Citizen and stakeholder engagement

4.3.3.1 What tools or methods have you already used or are you considering to use in the future to communicate and engage citizens and stakeholders?

From the 186 participants of the survey have 145 provided input regarding their used tools and methods. The answers were used to provide a list of methods and tools including the number how often it was mentioned. Tools and methods that had similar approaches were summarised.

Tools and Methods	Answers
World Cafe	2
Community workshops	33
Education in schools	7
Social media	20
Online websites/forum	29
Seminar/Presentations/Webinar	11
Surveys	17
Conferences	8
Events	15
Collaborations (e.g., museum, theatre)	5
News/Print media	15
Contest	2
Public discussion	8
Direct/public consultations (e.g. flyer)	21
Round tables	9
Focus group	4
Movie/documentary	1
Stakeholder meetings/interviews	6
Campaigns	9
Excursions	3
Citizen council	4

4.3.3.3 What groups are you particularly interested in engaging with? (more than one answer is possible)

Respondents had the possibility to select “groups” of different kinds (indicated with a blue and an orange rectangle in the figure below). The first “group” are civil society in general and parts of it, such as youth, vulnerable groups and elderly. The second type of “groups” are sectors of relevance for the adaptation process (health, education, business etc).

The importance of engaging with “civil society” in general becomes – expressed as percentage of signatories - obvious (16%) and as parts of the civil society, “youth” (12%) is regarded as more important than “vulnerable groups” (9%) and “elderly people” (9%)¹⁸.

Among the sectors (health, education, business, agriculture etc.) that need to be involved we see business and education slightly above the other sectors which have a more or less balanced importance according to the survey. Insurance and banking is the least important sector.

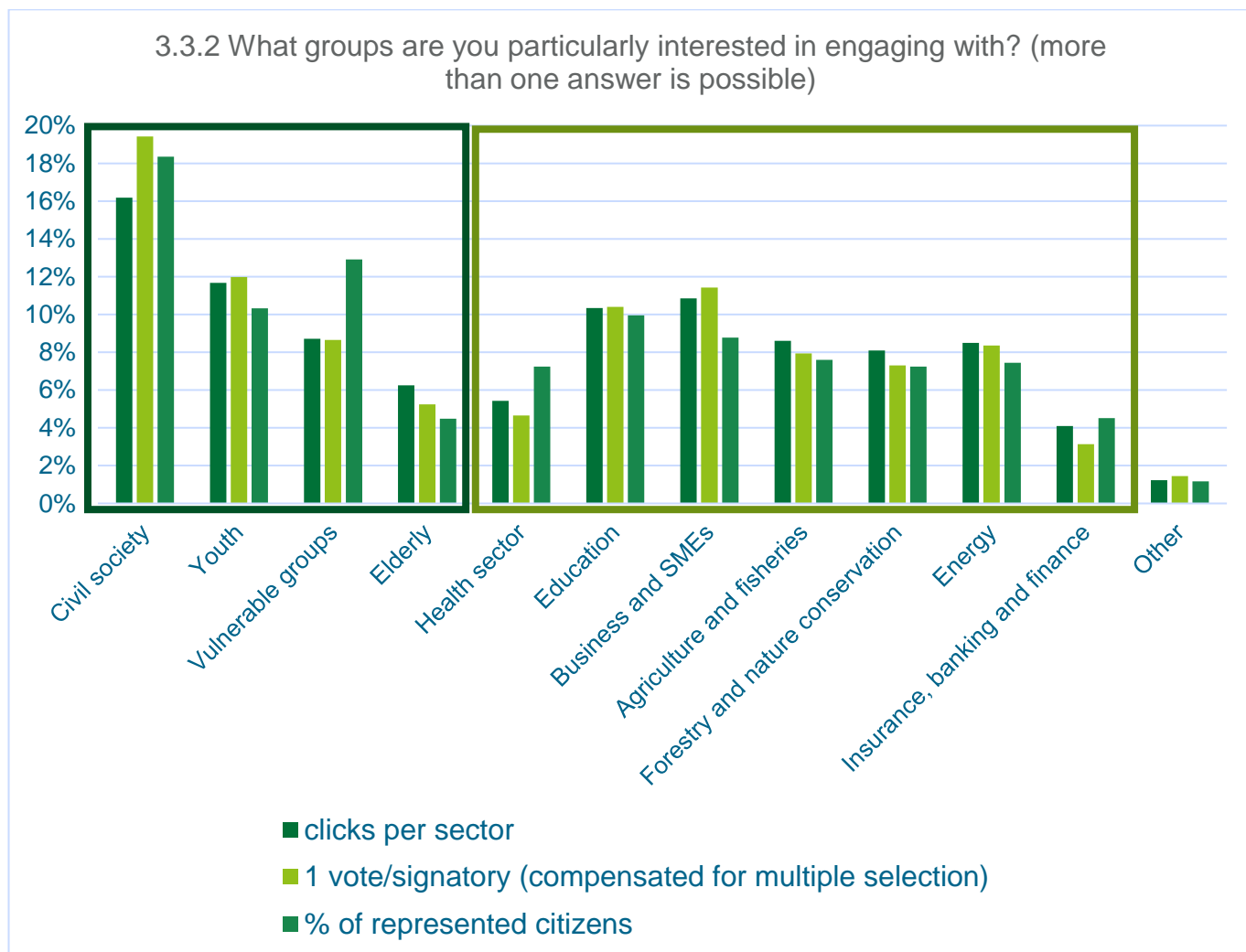


Figure 18: Relevance of different social groups and sectors for participation in the adaptation process. Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 3.3.2

18 What appears to be an outlier is the grey bar for “vulnerable groups”, expressing their importance in terms of represented citizens. It can be explained by the fact that only 21% of the signatories between 0 and 50 000

inhabitants have selected “vulnerable groups” but 70% of the signatories between 500 000 and 1Mio and 62% of those above 1 Mio inhabitants.

12 respondents provided comments. 6 of them mentioned engaging with the regional political/administrative level as important. Other comments referred to engage with engineers, water companies, Tourists, Transport and real estate representatives.

4.3.3.4 Do you face challenges/barriers when engaging with citizens and stakeholders?

More than half of the signatories see challenges or barriers concerning citizens and stakeholder engagement. One fifth of the signatories do not see such challenges or barriers. This indicates that there is room for action and improvement of communication in the participation process.

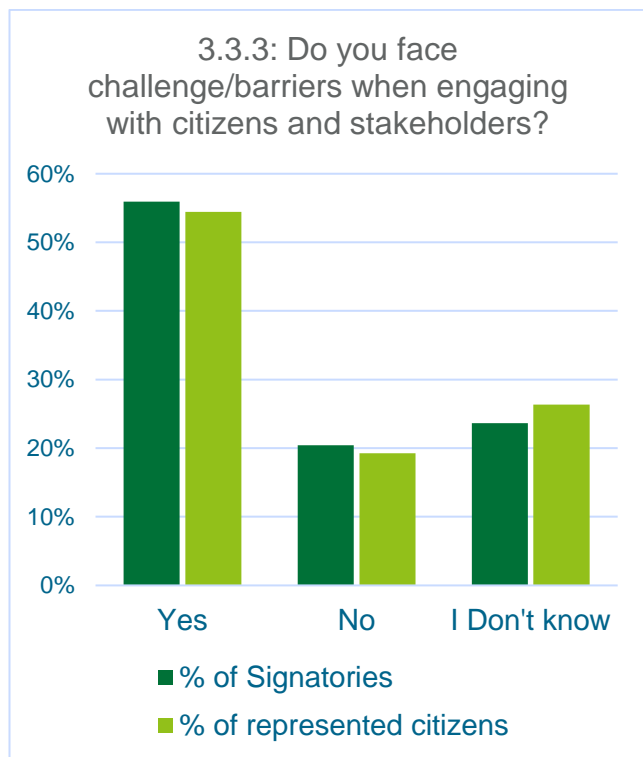


Figure 19: Ballot on the existence of barriers for citizens engagement. Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 3.3.3

4.3.3.5 What are the main challenges/barriers experienced when engaging citizens and stakeholders?

About 96 respondents made statements concerning the main barriers for citizen engagement. The answers were clustered in different categories and summarised to give an overview of the most common challenges that were mentioned by the participants. The number of assigned answers in the list is higher than the number of submitted answers. This is due to the fact that some answers apply to more than one criterion.

Category	Description	Answer
Lack of education/information/awareness	People facing a lack of information regarding the topic are harder to include in the participation process. That includes people as well that are not aware that a problem exists.	21
Lack of interest	People, who are aware of the problem and maybe know about the participation process but do not have any interest in participating.	20
Finding effective ways of communication	In many cases citizens consider consultations and participatory processes either too scientific or too general. Therefore, choosing the right and a good mix of different methods is essential for success.	15
Financial	Limitations in the ability to engage or take part in certain activities, programs, or opportunities due to a lack of financial means or affordability.	14
Lack of acceptance/misinformation	If people don't understand the type of measures being implemented and the benefits, they might be resistant to change, especially if these measures have a direct impact in their life. Also, the spreading of misinformation is a problem in that regard.	13
Lack of human resources/experience/competence	Shortage or insufficiency of qualified individuals with the necessary skills, knowledge, or expertise to perform tasks or meet the needs for participating citizens.	13
Reaching target public	The challenge to effectively and efficiently connecting with a specific group (e.g. vulnerable groups) of people with certain/targeted information.	11
Diversity of population	The challenge is to reach a wide range of the population because of various groups, such as different age ranges, ethnicities, genders, socioeconomic backgrounds, and abilities, among the individuals or entities.	8
Upright interest/engagement	It is challenging to keep up the interest of people or the engagement over a longer period of time. That includes the lack of motivation if the participation is not paid but time-consuming.	5

No compelling legislation for participation	If there is a lack in the legal guideline's authorities might not be motivated to start a participation process on their own.	4
No arrangement for cooperation	Public participation requires that there is a arrangement for cooperation already existing.	3
No share of information	People who are receiving information from authorities do not share them within their community. Therefore, the people who have participated have an information advantage.	2

4.5 Most suited support

4.5.1 Which of the following technical support activities would you like to be involved in? (More than one answer is possible)

Direct technical support on funding is the support activity most of the signatories would like to be involved in (26%). This confirms the importance of funding as already described under question

2.3 (on financial barriers) 2.3.2 (on assistance for funding¹⁹) and 2.3.3 (on project funding needs).

Other support activities (planning process, vulnerability assessment, citizens and stakeholder engagement) have more or less the same importance, around 15% of the signatories would like to be involved in these technical support activities. A helpdesk seems not to be so important, 11% of the signatories selected this option.

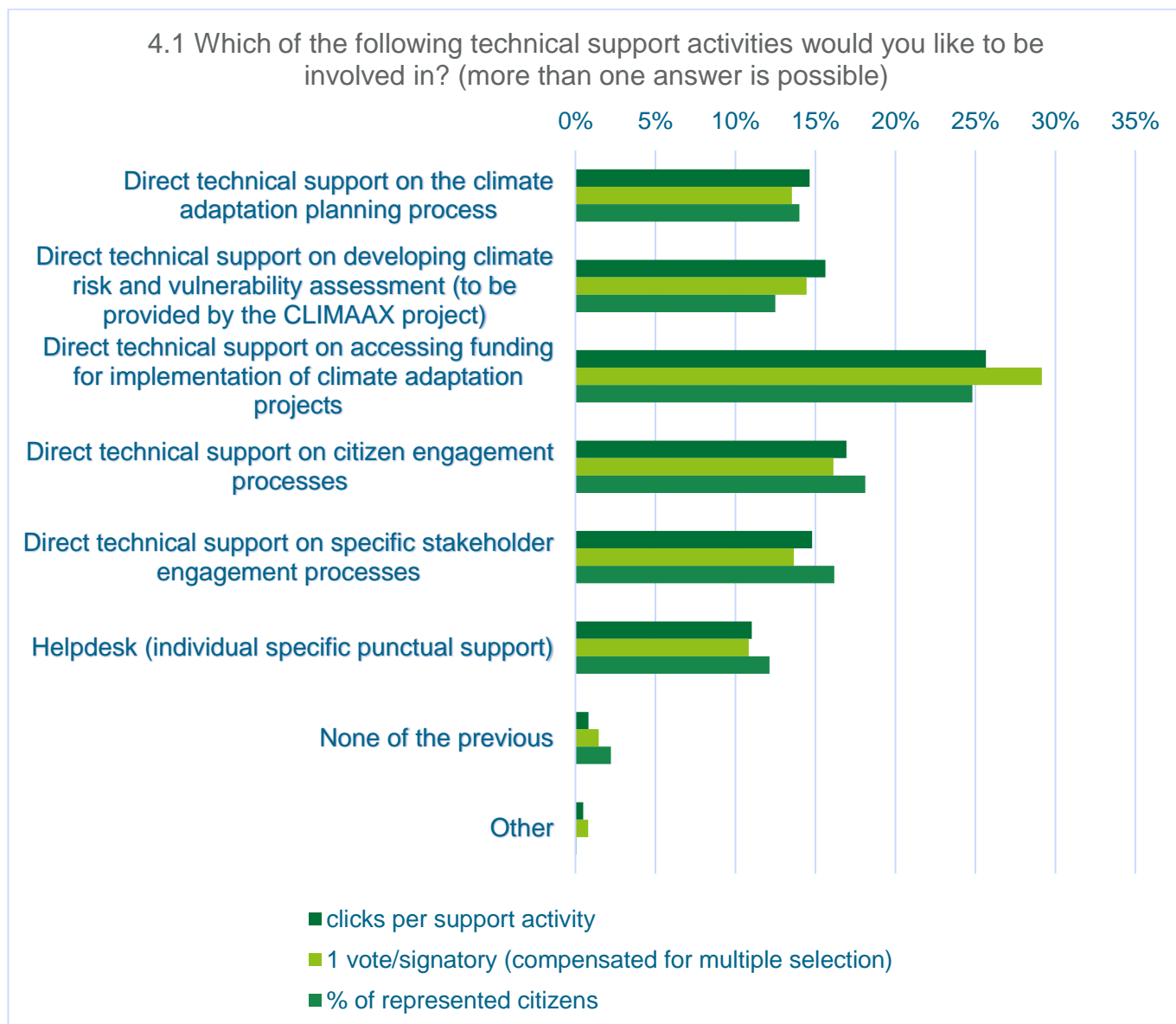


Figure 20: Assessment of desired technical support activities. (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 4.1)

¹⁹ Although there is a difference in the results for question 2.3.3 on the need for assistance in identifying funding opportunities 80% of the

signatories answered with yes, while for question 4.1 involvement in technical support for funding only 26% want to be involved.

One comment concerned involvement in monitoring an evaluation another one mentioned funding for implementation (which is +/- identical with the category “Direct technical support on accessing funding for implementation).

4.5.2 Which of the following other supporting activities would you like to be involved in? (more than one answer is possible)

A majority of signatories (57%) would like to be involved in exchange and support activities with “similar cases”. “Similar cases” are represented in this question by:

- 1) ‘Region-specific webinars and workshops’ – this is the regional approach to similarity.
- 2) ‘Twinning and matchmaking: sharing and learning from other regions and

authorities’ – this is an over-regional approach, based on similarity of challenges and case specific tasks.

‘In person events’ and ‘General online webinars’ with less emphasis on regional or case specific similarities are only selected by 43% of the signatories.

There are no big differences (max. 2%) between the metrics relating to signatories and those relating to the number of represented citizens i.e. similar views of larger and smaller signatories are observed.

For stakeholders remains the question on which basis or platform the search and selection for most appropriate twinning partners could take place.

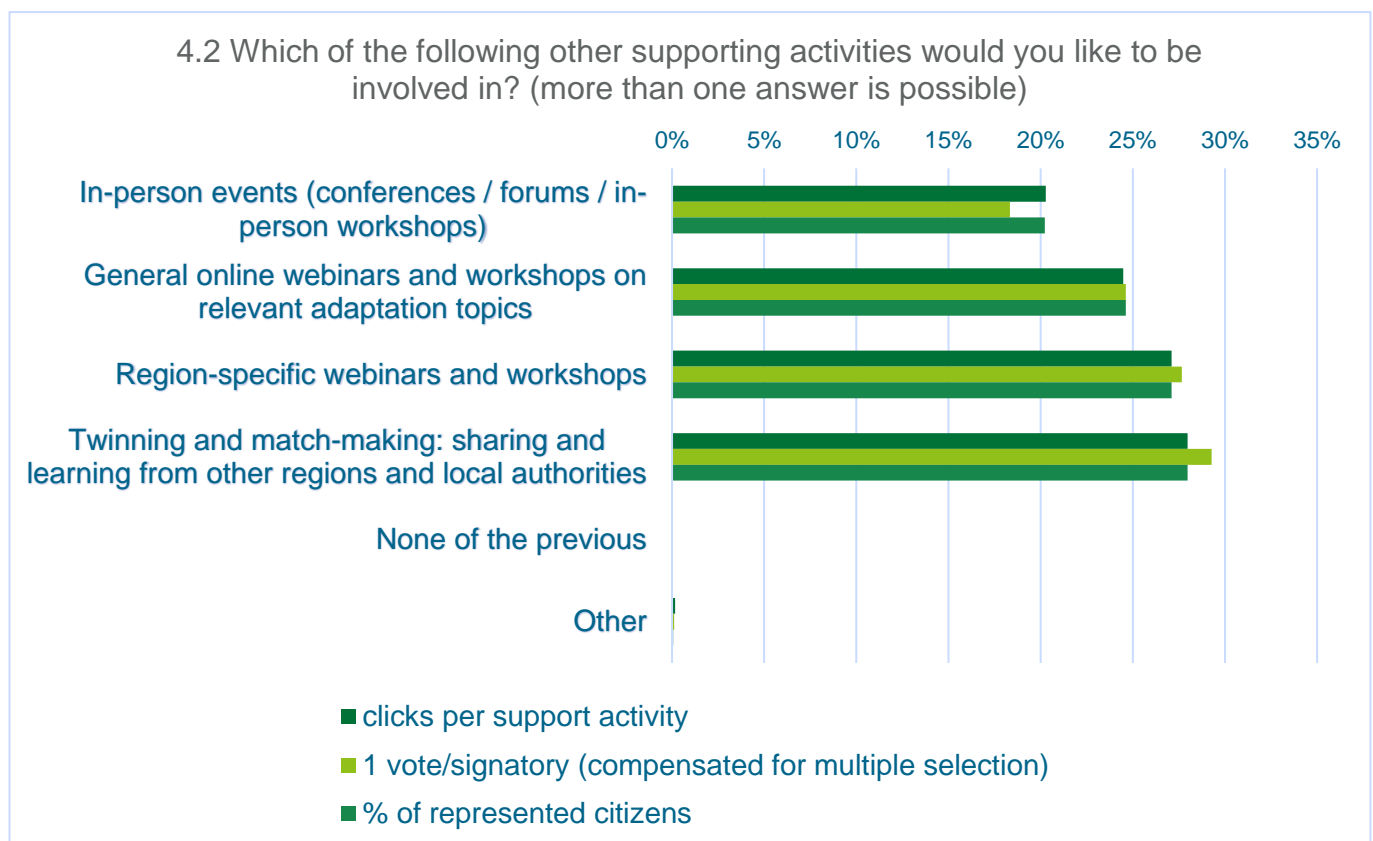


Figure 21: Assessment of desired other support activities’. (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 4.2)

One signatory made the comment that they would like to be involved in ‘Developing adaptation project ideas and finding partners and funding’.

The general picture described in the figure above can be scrutinised as follows:

Similar to some other questions in this survey respondents express sort of a decision uncertainty. This uncertainty is expressed by the fact that not one clear priority has been selected but multiple or all possible choices are made. The following figure illustrates this fact. It shows how many of the available options have been selected

by signatories. The result is that most of the signatories have selected all available 'other support activities' and that indicates that they have no clear priorities. Remains the question whether there is a difference between the size classes (expressed as citizens) or type of signatories (rural/urban).

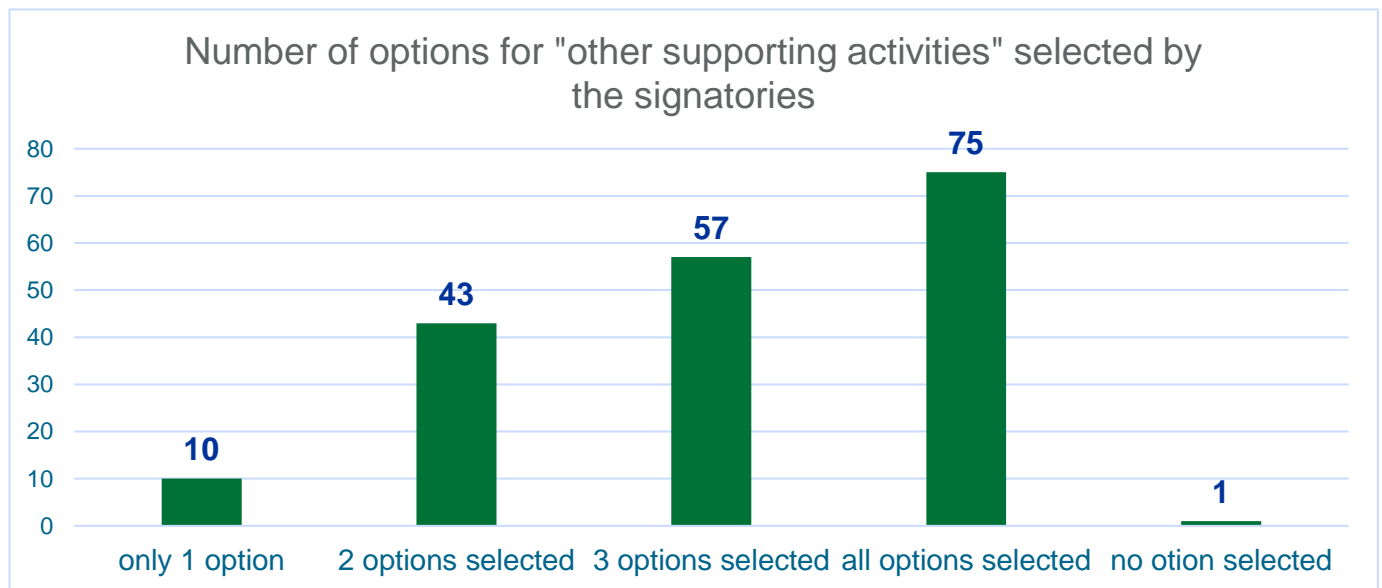


Figure 22: Most (75) signatories selected all available 'other support activities', indicating either a need for all of them or a decision uncertainty of respondents. No clear preferences for either of the support activities can be concluded. (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 4.2)

The general picture of the figure above can be further examined. The next figure shows the number of selected 'other support activities' and relates it to the size of the signatories. There is a clear difference between the different size classes of signatories. A majority of signatories above 50 000 inhabitants tends to select 'all other support activities' (44%-51%). Only signatories with 0-50 000 inhabitants are significantly different with only 19% selecting 'all other support activities'.

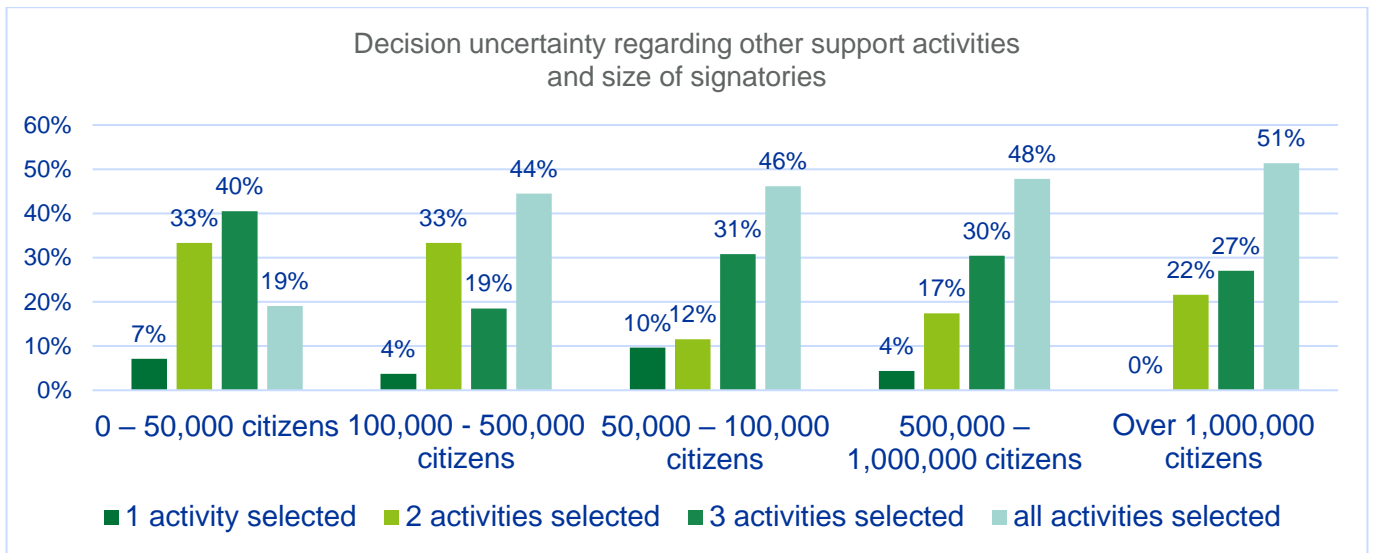


Figure 23: Does the number of selected ‘other support activities’ depend on the size of the signatory. Only small signatories selected significantly less ‘other support activities’. This figure suggests either ‘decision uncertainty’ among larger signatories or a ‘broader approach’ to ‘other support activities’. (Source of the figure: Content_Export_MissionAdaptationNeedsSurvey_needs_v1/sheet 4.2)

4.6 Any additional comment

38 additional comments were provided (some of them quite detailed and exhaustive and therefore need to be assessed in detail).

As also observed in other parts of this survey, financing and funding the different steps and activities is the major issue. Some suggestions were made on desired or improved financing mechanisms.

Several statements complained about resource limitations (personnel, expertise, financing) in the own institutions to address

adaptation issues sufficiently. In the context of resource limitations, some respondents support mutual learning, twinning approaches and platforms to improve exchange between stakeholders that are confronted with similar challenges.

Other suggestions concerned inclusiveness of approaches and that adaptation and mitigation need to be connected.

Some respondents propose that the ‘mission’ should liaise also with national and not only with regional players.



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