

# Risk perceptions, awareness and status quo of climate change adaptation in Austrian municipalities

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## RESEARCH QUESTIONS

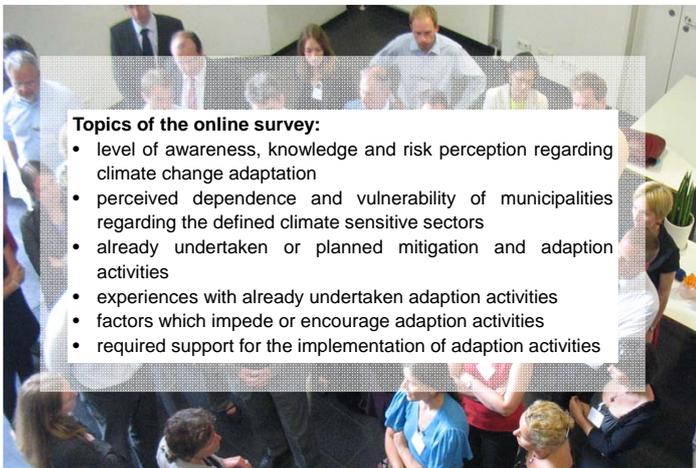
Climate change (CC) affects many socio-economic sectors and residents of communities. Adaptation to CC is therefore a key issue for several levels of decision making on municipal level. Since CC adaptation strongly depends on the adaptive capacities of socio-economic systems, problem awareness and proactive policy responses play a key role.

Thus, following questions arise:

- whether communities are aware of CC risks
- how they respond to the challenges of CC
- what are their needs for implementing adaptation measures.

## METHODOLOGY

In 2015, a representative online survey based on a standardised and structured questionnaire asked persons responsible for the topics of CC and CC adaptation of all Austrian communities about these topics. The survey assessed their perceived dependence and vulnerability against CC, awareness and status quo of CC adaptation in their community, their future plans and needs for support tools for the implementation of adaptation activities. The survey also asked factors which impede or encourage adaptation activities on municipal level. Several reminders were sent yielding in a response rate of 14%. Responses of 321 communities were collected, resulting in a sampling error of  $\pm 5\%$ .



### Topics of the online survey:

- level of awareness, knowledge and risk perception regarding climate change adaptation
- perceived dependence and vulnerability of municipalities regarding the defined climate sensitive sectors
- already undertaken or planned mitigation and adaption activities
- experiences with already undertaken adaption activities
- factors which impede or encourage adaption activities
- required support for the implementation of adaption activities

## FINDINGS: AWARENESS & KNOWLEDGE

- Results show that many Austrian communities are engaged in CC mitigation, while CC adaptation is so far not a relevant topic.
- 1/4 of them have never heard about the term CC adaptation (figure 1).
- Communities active in CC mitigation are also more active in CC adaptation.
- About 43% have already perceived negative impacts of CC.
- 2/3 are aware that CC adaptation is necessary (figure 2) and about 1/3 has already employed adaptation measures, mainly in the fields of infrastructure, traffic, energy and settlement development.

FIGURE 1: KNOWLEDGE OF THE TERM „CC ADAPTATION“

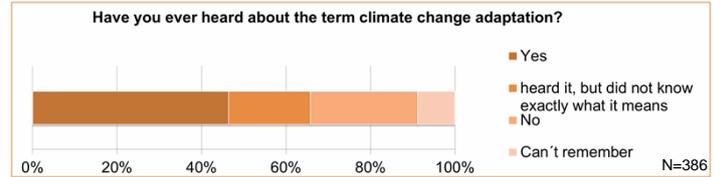
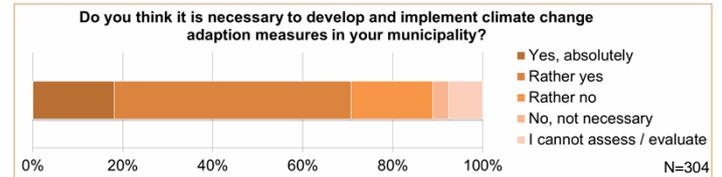


FIGURE 2: NECESSITY OF CC ADAPTATION MEASURES



## FINDINGS: NEEDS & CONSTRAINTS

- Constraints in employing adaptation measures are the lack of knowledge, the rather unimportant role of CC adaptation compared to other every-day community tasks and lacking personal resources (figure 3).
- Communities especially expressed a need for support by individual expert consultation (figure 4).
- The individual attitudes towards CC of the respondents and active neighbourhood communities seem to be significant drivers of becoming active in CC adaptation, while negative impacts of CC on the community such as storms or droughts were not predicting whether communities are active in adaptation.

FIGURE 3: CONSTRAINTS AGAINST CC ADAPTATION

Please rate how strong following factors hinder you to develop and implement adaptation measures in your municipality	1	2	3	4	5
Other topics are more important in our municipality	21%	38%	21%	15%	5%
Missing personnel resources	24%	33%	21%	15%	8%
Missing financial support for CC adaption	16%	27%	29%	20%	8%
Missing legal regulations	12%	20%	30%	25%	13%
Not enough information about the topic	10%	23%	29%	25%	13%

1 = very strong, 5 = not at all (N=248-279)

FIGURE 4: SUPPORTING MATERIAL

Please rate the importance of following support tools to develop and implement CC adaptation measures in your municipality	Very important	Partially important	Not important
Individual consultation by experts	45%	50%	6%
Practice-oriented lectures about the topic	25%	69%	6%
Practice-oriented trainings	28%	61%	11%
Manual with precise instructions	23%	60%	17%
Online consultation and online tools	13%	63%	24%

(N=286)

## SIGNIFICANCE FOR PRACTICAL SOLUTIONS

Building capacities for action on community level in Austria in a successful way requires the understanding of the needs, activities, and the knowledge for CC adaptation of communities. This survey points out that attitudes towards CC of persons who are responsible for this topic seem to be a key factor whether communities are active or not. Survey data assist in building capacities to cope with CC in supporting municipalities in adaptation by developing specific training tools.

