



ADAPTATION TO CLIMATE CHANGE AT DISTRICT LEVEL IN THE CASE OF BUDAPEST, HUNGARY

available only in online publication

Appendix I. Content of the scoring/evaluation matrix

Attitude (Maximum 4 points)

(Yes-1 point, No-0 points)

- Did the municipality attend the interview?
- Is the municipality a member of the Covenant of Mayors?
- Is the municipality a member of Climate-Friendly Municipalities?
- Did the municipality receive a climate awareness award?

Planning (Maximum 50 points)

- Does the municipality have a local Climate Strategy?
(Publication year: before 2014: 3 points - between 2014 and 2020: 2 points - after 2020: 1 point)
- Does the municipality have a Sustainable Energy and Climate Plan (SECAP)?
(Publication year: before 2014: 3 points - between 2014 and 2020: 2 points - after 2020: 1 point)
- Does the municipality have Environmental Protection Strategy?
(Publication year: 2021 or after 2 points - between 2014 and 2020: 1 point - before 2014: 0,5 points)
- At what level does the management of the four problem areas appear in the strategies (Climate Strategy and SECAP)?
(The points are given based on the problem areas covered by the adaptation actions: 4 points - 4 areas...1 point 1 area)
- At what level do the vulnerable sectors appear in the strategies (Climate Strategy and SECAP)?
(5 pre-defined sectors relevant for all the 23 districts, and points are given based on the sectors covered/mentioned: 5 points-5 sectors...1 point-1 sector)
- At what level do the vulnerable social groups appear in the strategies (Climate Strategy and SECAP)?
(7 pre-defined social groups and points are given based on the groups covered/mentioned: 7 points-7 groups...1 point-1 group)

- Do the strategies (Climate Strategy and SECAP) have any adaptation actions for the vulnerable sectors?
(5 pre-defined sectors relevant for all the 23 districts, and points are given based on the sectors covered by the adaptation actions: 5 points-5 sectors covered...1 point-1 sector covered)

Implementation (Maximum 10 points)

- Does the municipality have an Environmental/Climate Protection Department at the Municipality?
(Climate Protection/Sustainability Department: 2 points – Environmental Protection Department: 1 point)
- Does the municipality have an Environmental/Climate Protection Committee at the Municipality?
(Climate Protection/Sustainability Committee: 2 points – Environmental Protection Committee: 1 point)
- Does the municipality have any Environmental/Climate Protection websites?
(Yes: 1 point – No: 0 points)
- How many projects/tenders does the municipality have regarding climate adaptation?
(1 point:1 project/tender – 2 points: more than 1 project/tender)
- Does the municipality cooperate with civil organizations on the topic of Climate change?
(Yes: 1 point – Planning to cooperate: 0,5 point – No: 0 points)
- Does the municipality have Climate Fund/Environmental Protection Fund?
(Yes: 2 point – No: 0 points)

Appendix II. Expert interview questions

Name of the district:

Name of the interviewee:

Interviewee's position:

How long have you been working in this position?

1. Please, indicate on a scale of 1-10 the extent to which you are aware of the meaning of climate change (1-I am not aware of its meaning at all, 10-I am completely aware of its meaning):

1 2 3 4 5 6 7 8 9 10

2. Please, indicate on a scale of 1-10 the extent to which you are aware of the urban effects of climate change (1-I am not aware of the effects at all, 10-I am fully aware of the effects):

1 2 3 4 5 6 7 8 9 10

3. Please, indicate on a scale of 1-10 the extent to which you are aware of the meaning of climate adaptation (1-I am not aware of its meaning at all, 10-I am fully aware of its meaning):

1 2 3 4 5 6 7 8 9 10

4. Please, indicate on a scale of 1-10 the extent to which you are aware of the meaning of sensitivity to climate change (1- I am not aware of its meaning at all, 10-I am completely aware of its meaning):

1 2 3 4 5 6 7 8 9 10

5. Please, indicate on a scale of 1-10 the extent to which you are aware of the meaning of vulnerability to climate change (1- I am not aware of its meaning at all, 10-I am completely aware of its meaning):

1 2 3 4 5 6 7 8 9 10

6. Please, indicate on a scale of 1-10 the extent to which you are aware of the meaning of sustainability (1- I am not aware of its meaning at all, 10-I am completely aware of its meaning):

1 2 3 4 5 6 7 8 9 10

7. Please, indicate on a scale of 1-10 how much of a connection you think there is between sustainability and climate adaptation planning (1-there is absolutely no connection between them, and joint planning is not necessary, 10-there is a strong connection between them and joint planning is necessary):

1 2 3 4 5 6 7 8 9 10

8. Please, underline the topics affected by climate change in your district:

Heatwave

Flood

Flash floods

Damages due to storms

Damages to infrastructure

Spread of allergens and invasive, non-indigenous animal species
 Reduction of natural habitat
 Damages to forests
 Air pollution
 Tourism

9. Please, put the topics underlined in the previous question (8) in order of priority (the topic most relevant to your district should be at the beginning of the list):

10. Please, rank the age groups in the list below according to their vulnerability level to heat waves:

0-5-year-olds
 6-14-year-olds
 15-25-year-olds
 26-40-year-olds
 41-65-year-olds
 65+

11 In your opinion, would the previous question's results change if the age groups were categorized by gender? If you select the "Yes", please indicate for which age group would the result change (you can enter more groups):

No
 Yes:

12. In your opinion, which factors can increase the vulnerability of your district? What factors are relevant to the district (please underline)?

High population density
 Low education
 Low income
 High proportion of elderly people
 High proportion of 0-5-year-olds
 High proportion of homeless people
 Unorganized rental housing system
 Less green area
 Excessive car use
 Dilapidated, depreciated buildings
 There are many buildings under monument protection

13. Please, indicate on a scale of 1-10 how vulnerable you think your district is compared to other districts (1 being the least vulnerable compared to other districts, 10 being extremely vulnerable compared to other districts):

1 2 3 4 5 6 7 8 9 10

14. Please, indicate on a scale of 1-10 how suitable you think your district is in terms of climate adaptation compared to other districts (1 is the least adaptable compared to the other districts, 10 is the most adaptable compared to the other districts)

1 2 3 4 5 6 7 8 9 10

15. Please, indicate on a scale of 1-10 how important you think vulnerability analysis is (1-I don't think it's important at all, 10-I think it's very important):

1 2 3 4 5 6 7 8 9 10

16. Have you already carried out a vulnerability assessment in the district?

Yes (please, indicate the date)

No, and it is not planned.

No, but it is planned.

17. Please, indicate which sectors in your district are prioritized in terms of adaptability to climate protection (in other words, which sectors need to be focused on during adaptation planning):

18. Please, indicate the strategic connection points that are important during adaptation strategic planning (environmental protection policies, development policies, planning tools):

19. Please, indicate on a scale of 1-10 how much of a role you think local governments have in climate adaptation planning (1-they do not have any role in it, 10-they have a particularly big role in it):

1 2 3 4 5 6 7 8 9 10

20. Please, indicate on a scale of 1-10 what kind of relationship you think exists between COVID-19 pandemic and climate adaptation planning (1-COVID-19 pandemic has absolutely does not influence adaptation planning, 10-COVID-19 pandemic greatly complicates adaptation planning):

1 2 3 4 5 6 7 8 9 10

21. Does your municipality have Environmental Protection Department?

Yes

No

22. In case you answered yes to the previous (21.) question:

Is there a climate protection or environmental protection specialist in the Environmental Protection Department?

Yes (please, indicate which of them):

No

23. In case you said no to question 21:

Which department/group deals with issues concerning environmental protection and/or climate protection?

Answer:

24. Is there a department/group in which a climate protection or environmental protection specialist is employed?

Yes, climate protection specialist

Name of the department/group:

Yes, environmental protection specialist

Name of the department/group:

No

25. *Are you planning to launch a climate protection department?*

We already have one.

No.

Yes.

26. *Does your municipality have cooperation with civil organization(s) dealing with climate protection?*

Yes, name of the civil organization(s):

No, and we do not plan it.

No, but we do plan it.

27. *Are you a member of the Covenant of Mayors?*

Yes (since when):

No, but we plan to join.

No, and I do not have any information about the Covenant of Mayors.

No, and we do not plan to join.

28. *Are you a member of Climate-Friendly Municipalities?*

Yes (since when):

No, but we plan to join.

No, and I do not have any information about the Climate-Friendly Municipalities.

No, and we do not plan to join.

29. *Does the district have any local regulations related to climate adaptation? If not, does the district plan to create such regulations?*

Yes, we have:

No, and we do not plan to create.

No, but we plan to create.

30. *Are there any climate protection-related tenders among your announced tenders??*

Yes:

No, and we do not plan to announce.

No, but we plan to announce.

31. *In your opinion, who/what are the stakeholders of climate adaptation processes (planning, projects, etc.)?*

32. *Please indicate which obstacles may stand in the way of successful climate adaptation planning in your district!*

33. *Please indicate which drivers may help the progress of climate adaptation planning in your district!*

34. *Does your district have an environmental protection program/strategy (please also indicate the planning period included in the program/strategy)?*

Yes.

No, but it is in progress.

35. *Does your district have a climate protection strategy (please indicate the planning period included in the program/strategy)?*

Yes.

No, but it is in progress.

No, and it is not in the plans (please, justify it).

36. *Does the district have a Sustainable Energy and Climate Action Plan (SECAP)?*

Yes.

No, but it is in progress.

No, and it is not in the plans (please, justify it).

37. *Please, indicate which documents of the district include planning processes and objectives promoting climate adaptation (if there is a climate strategy, SECAP, environmental protection program, then they do not need to be listed, only additional, relevant strategies):*

38. *Please, indicate the approximate percentage of the local government's budget for environmental protection/climate protection actions:*

39. *Please, underline what resources may be available to your municipality for climate adaptation planning and actions:*

European Union tender resources (operational programs)

Savings

Involvement of businesses operating in the district

Municipal resources, such as Climate Fund

Other:

40. *Does your district have any separate websites for climate protection and/or environmental protection topics, actions, projects?*

Yes.

No, but it is in progress.

No, and it is not in the plans (please, justify it).

41. *Are there any ongoing climate adaptation projects in your district?*

Yes:

No, but it is/they are in progress.

No, and it is not in the plans (please, justify it).

42. *In case your districts has any projects promoting climate adaptation, please indicate on a scale of 1-10 the extent to which they have proven to be effective:*

1 2 3 4 5 6 7 8 9 10

43. *In your opinion, which age group is the most active towards climate adaptation planning?
Please, start with the most active one.*

- Smaller children (0-6-year-old)
- Elementary school children (7-12-year-olds)
- High school students (13-19-year-olds)
- Young adults (20-35-year-olds)
- 36-50-year-olds
- 51-65-year-olds
- 65+