

Survey: Analysis of Urban Heat Island Mitigation Techniques in Germany

HUMBOLDT-UNIVERSITÄT ZU BERLIN



Please provide the following information about yourself.

Name: _____

Company*: _____

Address: _____

Telephone: _____

E-mail: _____

* If the patent applicant is a company or group, please provide your information.

Part I (regarding UHI)

Q1. How important do you consider the mitigation of UHI to be?

- Not Important Relatively Not Important Ordinary
 Relatively Important Important Don't Know

Q2. Does the patented invention aim at mitigating UHI?

- Yes No Don't Know

Q3. If you answered 'No' to Q2, do you think that the patented invention is expected to be effective for mitigating UHI in Germany?

- Yes No Don't Know

Q4. Do you think that the patented invention is expected to be effective outside Germany?

- Not Effective Relatively Not Effective Somewhat Effective
 Relatively Effective Very Effective Don't Know

Q5. Do you think that the patented invention is expected to be effective for mitigating UHI outside Germany (such as Japan, China, the US, etc.)?

- Not Effective Relatively Not Effective Somewhat Effective
 Relatively Effective Very Effective Don't Know

Survey: Analysis of Urban Heat Island Mitigation Techniques in Germany

Q6. Do you usually develop technology for mitigating UHI?

- Yes No Don't Know

Q7. Which technology do you think is the most effective for mitigating UHI in Germany?

- Elements for buildings Elements for pavement Green roof
 Don't Know
 Other technologies (Please specify)
-

Q8. Which technology do you think is the most effective for mitigating UHI outside Germany (such as Japan, China, the US, etc.)?

- Elements for buildings Elements for pavement Green roof
 Don't Know
 Other technologies (Please specify)
-

Q9. In addition to technology development, do you have any idea for mitigating UHI? If yes, please specify the idea.

Part II (regarding Sponge-City Berlin)

Q10. Do you know about Sponge-City** in Berlin?

- Yes No

** "Sponge City" concept is one trial to reduce the temperature in urban areas by imitating rainwater circulation in the natural environment by leaving rainwater on the ground. By covering the surface of the building and the pavement with green and digging the trench to the side of the

Survey: Analysis of Urban Heat Island Mitigation Techniques in Germany

road in the urban area, the area can keep more moisture than ordinary cities and lower the urban temperature. This concept is also trying to ensure that cities can become better-adapted to the increasing likelihood of extraordinary rainfall events. For example, RUMMELSBURG in the eastern part of Berlin has been a large-scale case of "Sponge City" initiative 20 years ago.

For more details, please refer to the following video.

Berlin is Becoming a Sponge City - YouTube

<https://youtu.be/uWjGGvY65jkl> need to add the explanation of Sponge-City somewhere.

Q11. Do you think that the concept of Sponge-City is expected to be effective for mitigating UHI in Berlin?

- Not Effective Relatevely Not Effective Somewhat Effective
 Relatively Effective Very Effective Don't Know

Q12. Do you think that the concept of Sponge-City is expected to be effective for mitigating UHI other cities?

- Not Effective Relatevely Not Effective Somewhat Effective
 Relatively Effective Very Effective Don't Know

Q13. Do you have any idea for promoting the Sponge-City in Berlin? If yes, please specify the idea.

Part III (Others)

If you have other idea, opinion, or comments, please describe briefly.

Thank you very much for your cooperation. Your answer and advice would be helpful for dealing with UHI.