Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2020-181-AC3, 2020 © Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "Selecting and analysing climate change adaptation measures at six research sites across Europe" by Henk-Jan van Alphen et al.

## Henk-Jan van Alphen et al.

henk-jan.van.alphen@kwrwater.nl

Received and published: 29 October 2020

Thank you for reading our paper an providing thoughtful comments. We will try to address your comments in this response and of course in the possible revision of the paper.

You raise a number of fundamental points with regard to the structure of the paper, the topics it covers and to what extent it adds new insights to the existing literature. We believe that the approach of combining different analyses and conducting them in cocreation with stakeholders in quite different circumstances and case studies is what the work in BINGO adds. We will try to accentuate that, also by providing a more structural

C.

review of existing literature, as you suggest and give more explanation of why we did the analyses and what the outcomes were. We will also improve the abstract likewise.

The social justice analysis has its limitations, we agree, and these are mentioned in the text. In spite of these limitations, we found it helpful to confront the stakeholders/decision makers with the topic. We agree that it could be improved, also regarding the methodological side of the approach, but this exceeded the scope of BINGO as well as of this article. We will mention the potential of such an analysis, and that it needs more work/applications.

With regard to section 3.1, we will better explain what adaptation were made to the 3-layer framework.

With regard to the challenges mentioned in section 4.1: we included the reference to a recent peer review paper with a literature review of the topic as well as a conference paper with a literature review about it (Markanday et al., 2019; Dogulu and Kentel, 2015). One challenge briefly noted in 4.1 is the difficulty to bring together different stakeholders and different data types and knowledge about it in a methodology-format best fitting for a case. We will make that more explicit in the text of 4.1.

With regard to section 4.2, we agree that a growing number of projects dealing with climate change adaptation and methods tested exist, which we reckon a good development! MCA/CE/CBA frameworks have been published before, but their scientific base used and guidance for climate change adaptation are still developing. Additionally we have coupled the frameworks with risk assessment and also investigated the benefit of method-combinations (please see our section 4.7 combining frameworks).

We will change the heading of 5.3 as to your suggestion.

The discussion can indeed be improved by providing better links to the main text. Also, we will improve the language so that it is less cumbersome to read.

We hope we have covered the main points to your satisfaction and want to thank you

again for your thoughtful review.

\_\_\_

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2020-181, 2020.