Dear Dr. Adam Yeeles,

Thank you for the handling of our Perspective “Learning about urban climate solutions” (NCLIM-18061129). We have decided to commit substantial changes to the manuscript and have prepared a detailed response to the referees. We emphasize that there is no comprehensive map of the urban case-study literature available so far, to our knowledge. As an example, we provide a comparison of our database with the one by the Urban Climate Change Research Network, the most authoritative and recent scientific assessment on urban climate change, at the bottom of this letter. Beyond this, we would like to highlight three particularly important issues of the committed changes:

(1) Referee #3 raised a general concern of novelty in the first half of the manuscript, pointing out that our claims of bias in the urban case study literature have already been made. The novelty of this paper hence requires crucial clarification:

* First, it is true that some of the points have been mentioned in the literature, but they have remained without empirical foundation. We substantiate claims of bias with a large sample of the literature of ~4,000 urban cases (see Figure below). Therefore, we stand by the motivating statement in our abstract, that prior to this article, the “overall size, geographic scope and topic content of urban case studies remains basically unknown”.
* Second, we extend this analysis of bias into the topic content of cases. We think this is entirely novel – also from a methodological perspective (we apply text-mining methods to the literature). There is much to learn here on knowledge clusters (bringing opportunities for synthesis), gaps (research needs) and priorities (avoiding duplication).
* Third, we have now restructured the second half of the paper to provide a complementary discussion on how we can learn from the mapped out case literature. The comments from reviewer #3, where extremely helpful in doing that and we have done our very best to accommodate them.
* Fourth, we provide the full list of cases as a spreadsheet in this re-submission. This will be published with the article. It can be searched by city and topic, downloaded for analysis, and contributed to. We believe that this will be a huge service to the urban climate change community similar to the scenario database that was introduced in a recent NCC commentary. Hence we see this article as the starting point for on-going community efforts at in-depth case study mapping and synthesis.

(2) Referee #1 suggested that the compilation of case studies is incomplete with respect to non-English language articles and grey literatures. In response we adjusted our search query and extended our search to Google Scholar (GS). However, we found very few further relevant results in Web of Science, Scopus and GS, even with directed Spanish and French searches. In addition, inherent limitations with the GS platform (poor search quality, no bulk downloads, missing abstracts) lower the reproducibility and efficiency of using this platform. We of course carefully detail these limitations in our methods section, but again emphasize the new level of ambition (~4000 cases) brought by our approach that is not matched even closely anywhere.

(3) Referee #2 suggested to focus on issues of policy-relevance and potential uses for the mapped out cases. This motivated our re-structuring of the second half of the article, now organised into two sections “Three ways to learn from case study evidence” and “Synthesizing urban typologies and case study evidence”. We discuss learning at the level of individual cases, comparative cases, and in assessments; in each of these incorporating suggestions from Referee #2 and #3 on relevant literatures and work streams. We also brought major edits to the typology section, adjusting the text and figure to make this conceptual approach clearer.

Overall, we believe this re-submission addresses all of the major concerns, but remains organised around an interesting and novel set of research questions, with a large potential for community impact and facilitating future research.

Best regards,

William F. Lamb & the author team



