This document provides our answers to Luise Westphal for "**Methane mapping, emission quantification, and attribution in two European cities; Utrecht, NL and Hamburg, DE**"

We thank Luise Westphal for the comment; please find our reply below. In the following, the short comment is in normal black text, our replies are in normal blue, and changes is the manuscript are in *blue italic* format.

Gasnetz Hamburg could not confirm 80 % of the LI as pipeline leaks. This issue requires further investigation. Therefore, we set up a joint project together with IMAU. The field test campaign in Hamburg is ongoing. The objective of the project is to compare leak rate estimates from mobile methods with ground measurements applying the suction method for a small sample of leaks in a real-life situation. For this reason, we request to give more explanation on that statement, e.g. by the conditional "[…] once the LIs were shared. Further, it must be considered that the leak detection of the gas utility and University of Utrecht did not take place at the same time (several weeks in between). It might be possible that changing weather and soil conditions prevented finding leaks on different events. Furthermore, a "fossil leak" does not necessarily originate from a pipeline. It could also come from natural gas vehicles, thus, it is only presented for a very short time. We are highly confident, that regular LDAR (Leak Detection and Repair) is capable of finding the vast majority of leaks. Accordingly, we suggest rewording the sentence for example to "Gasnetz Hamburg could not confirm 80 % of the LI as pipeline leaks. This issue requires further Investigation."

We acknowledge the fact that no leaks were found at a large number of locations could have several reasons. Therefore, we changed the respective sentence to (see Abstract, L30-32): *The largest leaks were located and fixed quickly by GasNetz Hamburg once the LIs were shared, but 80 % of the (smaller) LIs attributed to the fossil category could not be detected/confirmed as pipeline leaks. This issue requires further investigation.*

We want to specify that in our algorithm emissions from vehicles are identified (when attribution is possible) by using the co-emitted species C_2H_6 and CO_2. The 80% of LIs where no leaks were detected by GNH refers to the LIs that we have attributed to the category "fossil", which should be specific for leaks from the NGDN.