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## Interactive comment on "Decoupling of urban CO<sub>2</sub> and air pollutant emission reductions during the European SARS-CoV2 lockdown" by Christian Lamprecht et al.

## **Anonymous Referee #2**

Received and published: 25 December 2020

Lamprecht et al. present the flux observation results of air pollutants such as NOX and VOCs and CO2 before and after the lockdown measure during the COVID-19 pandemic. They found more pronounced reduction in trace gas flux than the relative reduction of CO2 flux. With this observation, the authors assess the emission inventories from different sectors such as mobile and the residential, commercial, and public (RCP) sector. They have attributed their findings to the EU policy to promote natural gas whose combustion emits less air pollutants than those from conventional energy sources such as coal and biomass.

In general, the manuscript is well written and has scientific merits to take advantage of

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unintended global emission reduction measures from the pandemic related lockdown measures. However, I would like to suggest to include information described in the supplementary section to the main text for readability. Particularly, the discussion about the flux footprint and what emission sources are distributed in the foot print is critical to evaluate the quantitative discussion on the emission reductions from different sectors.

Interactive comment on Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2020-1080, 2020.