This paper applied the eddy covariance technique to measure the NOx and CO2 flux in central London during the pandemic restriction period and by comparing it with the data obtained in 2017, authors evaluated the relative change of NOx flux, CO2 flux, and traffic load. With external constraints on NOx and CO2 emissions, the change in inventory sectors can be estimated. According to the spatial mapping analysis, the significant role of point sources on NOx emission was uncovered and authors recommended further legislation on heat and power generation to achieve the new WHO NO_2 air quality target. This paper is interesting by covering the urban NOx flux and its source investigation analysis. However, the urban-relevant flux data are quite limited because of the challenges of conducting flux measurements in the urban landscape. Overall, before considering further revision and potential publication, the comments below should be addressed.

1. Please provide more information to demonstrate such flux measurement setup on the BT tower fulfilled the requirement of the eddy covariance method. Several questions should be answered with the help of more detailed information including but not limited to:
whether the sampling height was within the inertial sublayer;
whether the data measuring frequency can cover the entire range of energy-carrying eddies;
whether the mast where the ultrasonic anemometer was attached was solid with little waggle;
whether the storage term and NOx chemistry had a significant impact on the measured flux…
2. It would be a rigorous approach to describe how lag-time was determined and what was the general QAQC results of the flux data according to the eddy4R software. The widely adopted 1-10 quality matrix is recommended to describe the quality control results instead of using high-quality.

Below are some more specific comments:
1. Line 29: Please add the reference for this sentence.
2. Line 61: The full name of BT tower should be added where it was first mentioned.
3. Line 127-128: Please define high-quality fluxes. Given the turbulent situation and characteristics of the city landscape, the flux data failed the QAQC criteria could be a lot based on my own experience. Therefore, specifying your QAQC flag matrix would be important,

4. Line 132-133: According to my reading of figure 2, the statement here was not accurate. The lowest traffic flow was in Jan. but clearly, the NOx flux during the same time was not the highest. Please improve the statement.

In terms of figure 2, I am quite interested in the trend of NOx flux from April to August. The traffic flow gradually increased as the stringency index decreased but the NOx flux decreased showing anti-correlation with traffic flow. This is odd to me. Maybe the authors can discuss this phenomenon.

5. Line 135-138: The comparison of the average diurnal profile between 2020/21 and 2017 data set cannot get the percentage reduction directly. I am guessing the 75% reduction of NOx flux referred to the difference in average NOx fluxes, then it would be clearer to include the actual value before the statement of the percentage change.

6. Line 156-157: Please add reference to the previous observations mentioned.

7. Line 161-163: There was another assumption that the emission characteristics of the heat and power generation remained the same so that the emission ratio of NOx and CO2 was assumed to be constant. If there is any reference to support this assumption, it would be nice to have it cited.

8. Line 176: I might be wrong but I think, because of the modernization of the vehicle fleet resulting in lower NOx/CO2 emission ratios, the hydrocarbons in the fuel can be more completely and efficiently converted to CO2. If this is true, then the second bounding condition may not be the case. CO2 emission can decrease by less than 32%.

9. Line 204: Figure 5 having the split data by wind direction was interesting. I also noticed that data points measured with east and north wind were less condense comparing the rest of the data. It looks like there were more data points or NOx emissions might come from sources that were less related to traffic flow. Maybe in the upwind footprint area of east and north, there were more heat and power generation sources? It would be great to include such a discussion.