**Reviewer's comment:**

The author has made a lot of improvements according to the refs' comments. There are a few more minor comments and suggestions.

1. Although the author has limited the number of graphs, there are still too many figures. Is it possible to merge some graphics with similar information and display them in the form of sub-graphics?

**Answer:**

We merged some figures and reduced their number to 7 (from 13 figures of the first submission and 9 of the second submission). We merged the graphs on GHG from energy use per unit of cropland of Annex I/NAI and continents. They are now side-by-side, so that the Annex I/NAI trend uses another scale and is still clearly visible. Total energy emission trends by continent have been merged with top emitting countries, since both measure GHG from all energy carriers used in agriculture.

**Reviewer's comment:**

2. On page 2, Line 35-36, the authors try to use one single 'agriculture' sector to cover three sub-sectors: agriculture, forestry, and fisheries. It seems fine. However, in many other places in the paper, the 'agriculture, forestry and fisheries' is still used to describe the aggregated sector, which seems a bit confusing. No matter what kind of narrative, please be consistent.

**Answer:**

We revised accordingly, so that starting from page 2, where it is clarified that in our analysis "agriculture" includes the forestry and fisheries sub-sectors, the manuscript text always refers to "agriculture". We nonetheless added ''(including forestry and fisheries)'' whenever we felt it was important as a reminder to the reader.

**Reviewer's comment:**

3. According to my knowledge, IPCC estimated that the uncertainty for countries with less well-developed energy statistic systems may be on the order of ±10%, whereas the range for the countries with good energy collection systems is ±5% (this figure is also referred in this paper). The author found "an uncertainty range in emissions of -7 to 16%. The overall resulting uncertainty ranges are between -9 to +17%" (on page 5). How to explain why this upper bound data is so large? Need some explanation.

Yes, uncertainty in activity data from "well developed statistical systems" is ±5% and from "less developed statistical systems" is ±10% or more. We assumed an error of ±5% for activity data (also confirmed by UNSD Energy Statistics colleagues) since usually fossil fuel consumption statistics are very reliable as they are also used for taxation purposes. The -7 to 16% range represents the error associated with the IPCC default emission factors (by calculating upper and lower bound of emission factors of each fuel and taking a weighted average based on world fuel consumption data. The final resulting uncertainty range is the result of error propagation of activity data and emissions factors data, computed as per the default approach of the IPCC guidelines We clarified it in the text.

**Reviewer's comment:**

4. On page 8, Line 13-14, "This analysis shows how Europe has been steadily improving its agricultural GHG intensity (both in terms of unit of cropland and of unit of agricultural production value)". What is the meaning of improving emission intensity? Is there a problem with this

sentence? You said that Europe's emissions went significantly down, so I think the emission intensity was reduced.

**Answer:**

By ‘improving’ we meant ‘decreasing’. But agree that it was not very clear and we edited it in the text. Thank you for highlighting it.

**Reviewer’s comment:**

5. Although the authors have made a lot of improvements, some paragraphs are still chaotically divided. please check carefully.

**Answer:**

We reviewed the text one more time and found some minor opportunities to improve readability (such as by improving punctuation). Thank you for pointing it out. We trust the revised text is now acceptable.