

## ***Interactive comment on “Global CO<sub>2</sub> Emissions from Cement Production” by Robbie M. Andrew***

### **Anonymous Referee #1**

Received and published: 24 September 2018

Overall a good and useful update from prior version, easy to read and access data.

A few small suggestions:

Living data process seems to work, changes clearly marked in this version of manuscript.

Data downloads easily, although I question significant figures. E.g. from .csv, USA in 1950 shows 19722.779928: 12 significant figures? Somehow I doubt that the author intended that precision.

The url link in the USGS 2014 reference does not work. Please check and update?  
The url link in the BP 2018 reference does not work. Please check and update?  
The url link in the UNFCCC 2018 reference does not work. Please check and update?

Based on these three quick checks, a careful check of the entire reference list to ensure

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proper function of all urls seems in order?

Page 4 line 31: “IPCC Guidelines now recommend use of a default clinker ratio of 0.75” 0.75 should rather be expressed as 75%? But because of blending this number should be lower than prior estimates, e.g. lower than 60-67%. So the 0.75 represents a fraction of the default ratio, e.g. 0.75 times 60%, to give 45%? Author allows confusion here?

Page 5 line 27: here reader first encounters “tier” categories. Explain tiers 1, 2, 3?

Page 6 line 27: here reader finds a clinker ratio of 0.95, high as expected for OPC. But how does this number compare to the 0.75 earlier and to the clinker ratios of 60 to 67 % cited earlier. Confusing cement chemistry (64% CaO by weight) with clinker content? If this reader finds these numbers confusing, others will as well? Some hints evident at the top of page 8? Appendix A1 and likewise Appendix E supplies definitive information but we could at least have had a clearer summary and explanation of terms earlier? Perhaps a short table to define terms somewhere near the top of the Introduction section?

Page 24: I do not find reference to Figure D4 anywhere in the text?

Nice credit to CDIAC in the Acknowledgements.

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