Earth Syst. Sci. Data Discuss.,
https://doi.org/10.5194/essd-2020-275-RC2, 2020

Open Access Earth System Science Data Discussions

Interactive comment on "Global CO_2 uptake of cement in 1930–2019" *by* Rui Guo et al.

Anonymous Referee #1

Received and published: 11 November 2020

Ms. Ref. No.: essd-2020-275-manuscript-version2 -peer-review-v2 Global CO2 uptake of cement in 1930–2019 Dear Authors, Thank you for your very kind and clear answers.

With regard to your questions:

Line 49: I think that is not in contradiction. It is well-known that cements with low content of clinker lead to lower carbon dioxide footprint. In addition, blast-furnace slag also carbonates as shown in mentioned references.

Line 395: The trends at global and local level scale are similar. Post-1990 period correspond to the highest cement production and, therefore, the highest carbon dioxide uptake. It is suggested to mention other examples or references.

Line 475: Probably in Figure 9 in reference: https://doi.org/10.3390/en13133452 Energies 2020, 13(13), 3452.

Printer-friendly version

Discussion paper

Line 479: In the conclusions, references to Figures should be avoided. This is the reason to suggest deleting such reference.

Finally, it is a pity your decision not to publish the uncertainty calculation code for the time being. It would be quite necessary to provide this information in order to include the carbon dioxide uptake in the IPCC Emission Factor Database.

Congratulations for the great work.

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2020-275, 2020.