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CORRECTION

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Correction: On the energetic efficiency of producing polyoxymethylene dimethyl ethers from CO_2 using electrical energy

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Correction for 'On the energetic efficiency of producing polyoxymethylene dimethyl ethers from CO_2 using electrical energy' by Maximilian Held *et al.*, *Energy Environ. Sci.*, 2019, **12**, 1019–1034.

In the original manuscript, we interpreted ref. 53 wrongly and took the heat demand of post-combustion capture as 1.33 MJ per kg CO_2. However, the correct value should be 3.33 MJ per kg CO_2. The correction of this mistake leads to slight changes in the numerical results of the paper. (The conclusion and the discussion remain unchanged.)

The following sections of the manuscript should be corrected as follows, with the changes indicated in bold:

- Section 3.1: "Hence, **3.33 MJ** heat needs to be supplied..."
- Section 4.2.1: "For Scenario S1, CC *via* PCC leads to a roughly **6 MJ (+10%)** larger thermal energy demand..."
- Section 4.2.2: "When PCC is used, its heat demand is **partly** covered in scenario S2 by the excess heat of the MeOH synthesis **and 2.8 MJ heat has to be supplied additionally.**"
- Section 4.2.2: "In scenario S3, the excess heat of the MeOH synthesis is also needed in the OME_{3-5} synthesis. Hence, the heat demand for PCC is only partially covered. A remainder of **5.4 MJ for route A and 5.5 MJ for route B** has to be supplied externally for PCC."
- Section 4.3: "The supply of CO_2 *via* PCC **has a small negative** effect on the efficiency in scenarios S1 and S3, resulting in efficiency drops of about **3 percentage points.** In Scenario S2, the additional **heat demand is partly covered** by excess heat from the MeOH synthesis, therefore there is **only a small effect** on the efficiency when compared to CPS (**about 1.5 percentage points**)."

The Fig. 5 and 7 should appear as follows, both corrected for all PCC options.

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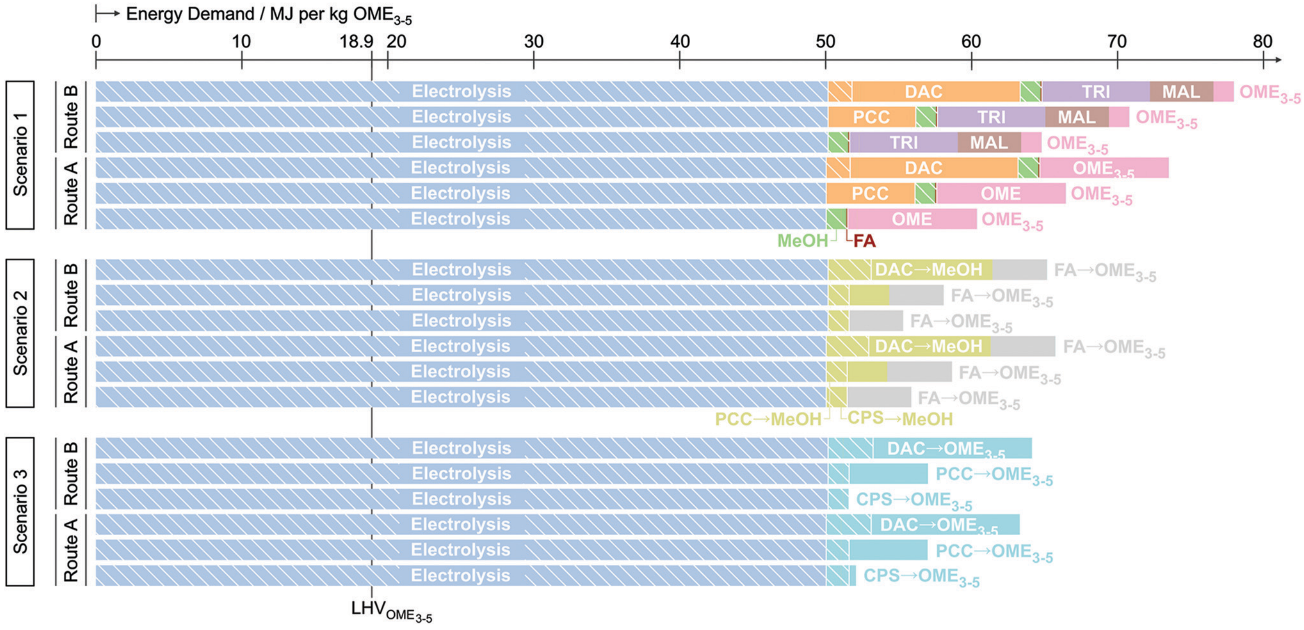

Fig. 5 Proportionate energy demand share of single process steps of OME_{3-5} production, in MJ per kg OME_{3-5}. Electrical energy is shown as cross-hatched bars, thermal energy is shown as filled bars.

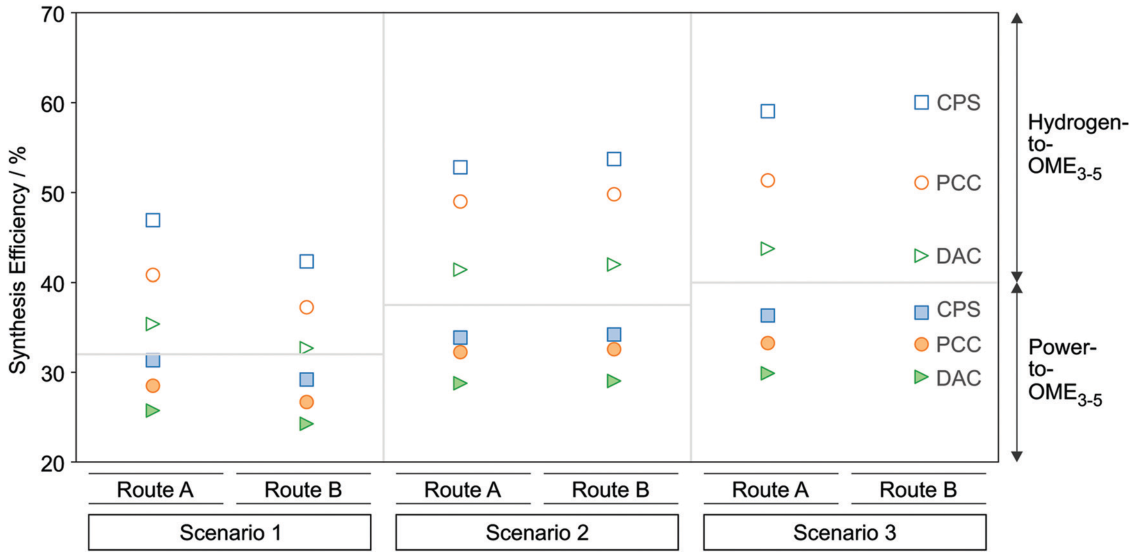

Fig. 7 LHV-based energetic efficiency of OME_{3-5} production from electrical energy and CO_2 (Power-to-OME_{3-5}) and from H_2 and CO_2 (Hydrogen-to-OME_{3-5}). The Power-to-OME_{3-5} efficiencies are based on an electrolysis efficiency of 60%.

The Royal Society of Chemistry and the authors apologise for these errors and any consequent inconvenience to authors and readers. The authors thank Stefan Heyne for alerting us to the incorrect data.

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