

CORRECTION

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Correction: Hydrogen production from natural gas and biomethane with carbon capture and storage – A techno-environmental analysis

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Correction for 'Hydrogen production from natural gas and biomethane with carbon capture and storage – A techno-environmental analysis' by Cristina Antonini *et al.*, *Sustainable Energy Fuels*, 2020, 4, 2967–2986, DOI: 10.1039/D0SE00222D.

Fig. 6 in the original submission contained the following error. In the manuscript, Fig. 6 illustrates the life cycle climate change impacts of hydrogen production from different types of reforming of either natural gas (NG) or biomethane (BM), with or without ("no CCS") carbon dioxide capture and storage. In the published manuscript, due to a minor error in the Excel file used for the calculations, the "Total" values for biomethane reforming (represented in the figure by a black diamond and the associated error bar, calculated as reported in the original manuscript) were miscalculated, with values smaller by 0.014 kg CO₂-eq. per MJ H₂ than the correct ones. The figure presented in this correction now reports the correct values (accordingly, the LCA ESI file has also been corrected and updated). It is worth noting that such a small quantitative correction does not impact the findings and the conclusions of the manuscript, which remain unchanged. However, the correction affects a small but noteworthy detail, namely the sign of the upper bound of the total climate change impact for H₂ production from biomethane when CCS is not implemented. As readily observed in the figure below, this sign is now positive, while it appeared to be negative in the original figure because of the miscalculation. The sign of the reference value (diamond symbol) remains negative in the corrected figure as it was in the original one. The corrected Fig. 6 appears below.

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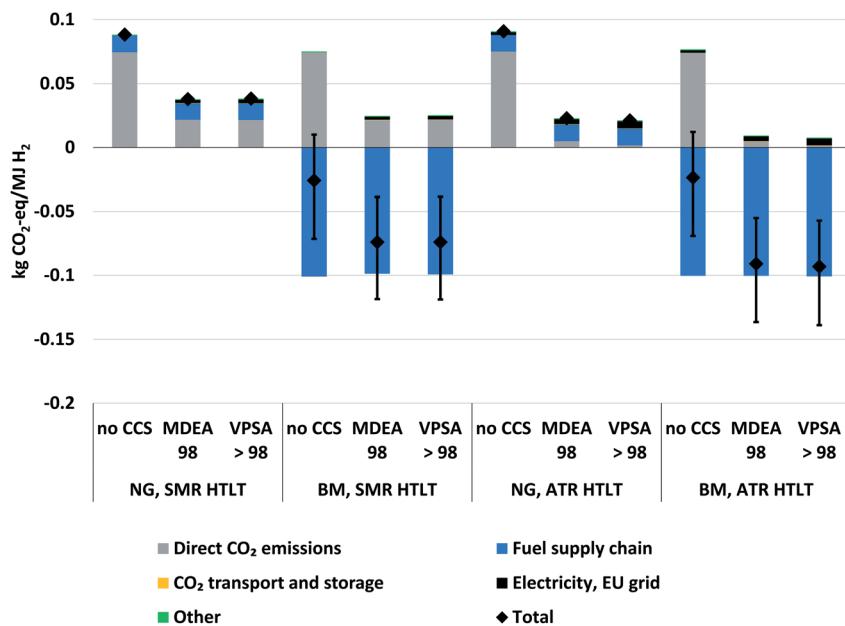


Fig. 6 Life cycle climate change impacts of H₂ production with natural gas (NG) or biomethane (BM) as feedstock/fuel, shown for the HT + LT configurations and 98% CO₂ capture rate in capture unit. Bars reflect the variations modelled in the cases presented in Scheme 9.

The Royal Society of Chemistry apologises for these errors and any consequent inconvenience to authors and readers.

