

Errata for “Comparison of CO₂ Capture Approaches for Fossil-Based Power Generation: Review and Meta-Study”

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Summary

We recently noticed that the supplementary material file uploaded with our original submission¹ was incorrect (it was from an older version of the manuscript which contained fewer case studies). As a result, we decided to complete a rigorous audit of all of the data taken from cited sources. In most cases, the changes to the data were small, and because averages and ranges of the data were used, the overall effect was minimal. For example, the revised Figure 15 showing average characteristics in each category had changes measured in a few pixels at most, and are otherwise imperceptible. Thus, after this review, we determined that there are no changes to the methodology, the conclusions, nor any of the general trends or findings of the paper. The changes to the most important figures in the paper showing the results of the meta-study (for example, Figures 12 and 13 in the original work) contain only small differences. However, the number of individual corrections was enough to warrant the creation of an errata to ensure that the most up-to-date version of the data are available to the reader. We apologize for and regret these errors. The changes made to the dataset generally fall into one of these categories:

1. *Incorrect reference numbers*: The citation numbering of certain papers was often “off-by-one” due to a mistake during the editorial process, or the reference was incorrectly made to a different work by the same author. These were corrected.
2. *Secondary reference errors*: In some cases, we found that although information was cited from a paper correctly, that paper in turn had an error in reporting the number incorrectly from another source. These were corrected to be consistent with the primary (older) source.
3. *Typos*: Keystroke errors were corrected. In many cases, the keystroke errors were purely cosmetic because they occurred only in the reported table in the manuscript but not the analysis itself, and thus had no effect on the results.
4. *Wrong basis year or country*: In some cases, the purchasing power parity (PPP) from a close but incorrect year or country was used (such as 2015 instead of 2016 or Germany instead of Netherlands). These were corrected but typically had negligible effects.
5. *Incorrect inclusion of transportation and storage of CO₂*: In some cases, we had used a cost reported in a reference which included the cost of transportation and storage (T&S) of CO₂. We adjusted the costs to remove T&S, although it was a small percentage of the total cost.
6. *LHV to HHV conversion mistakes*: In some cases, data reported in cited works were on a lower heating value (LHV) basis, and were not converted to a higher heating value (HHV) basis correctly. This has been corrected.

A revised supplementary Microsoft Excel file with the corrected data has been provided. Itemized changes are provided at the end of this document. The key figures and tables using the new information are below.

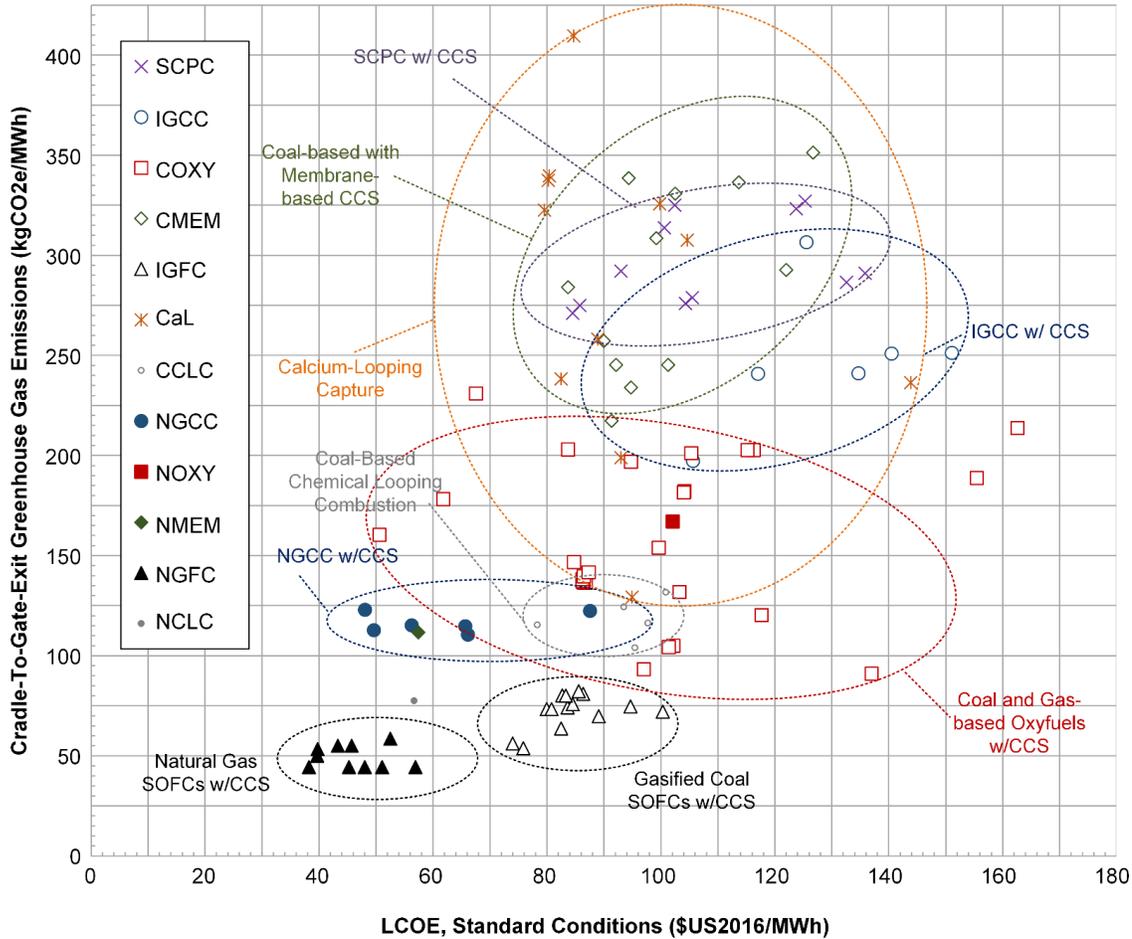
¹ Adams TA II, Hoseinzade L, Madabhushi PB, Okeke IJ. Comparison of CO₂ Capture Approaches for Fossil-Based Power Generation: Review and Meta-Study. *Processes* 5: 44 (2017)

There is one typo in the paper itself. The cost factor should be divided by the PPP index, not multiplied by it. This was done correctly in the original analysis so changes to the methodology were not needed. The correct equation should read:

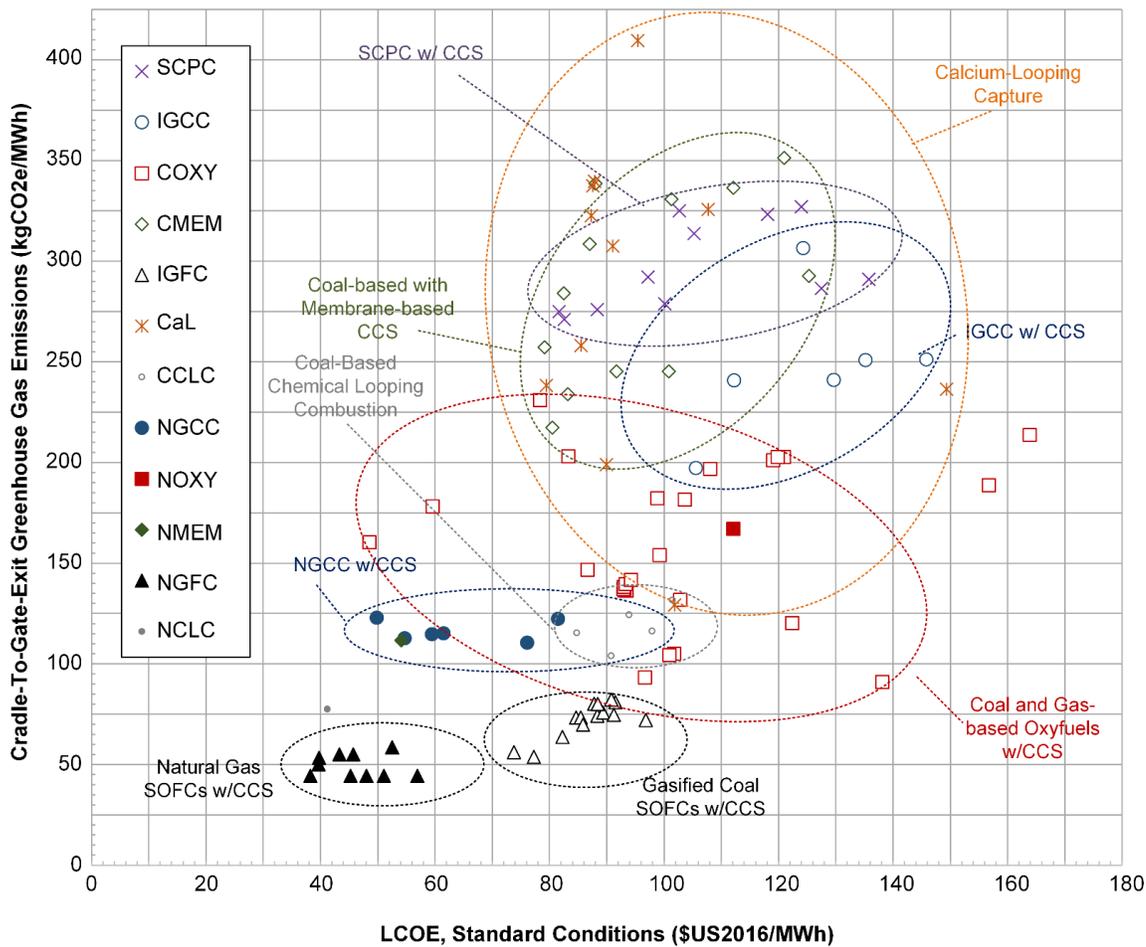
$$C_{nonfuel,scaled,standard} = C_{nonfuel,scaled} \left(\frac{PCCI_{2016Q1}}{PCCI_{originalyear}} \right) (PPP_{country,originalyear})^{-1}$$

Updated Figures and Tables

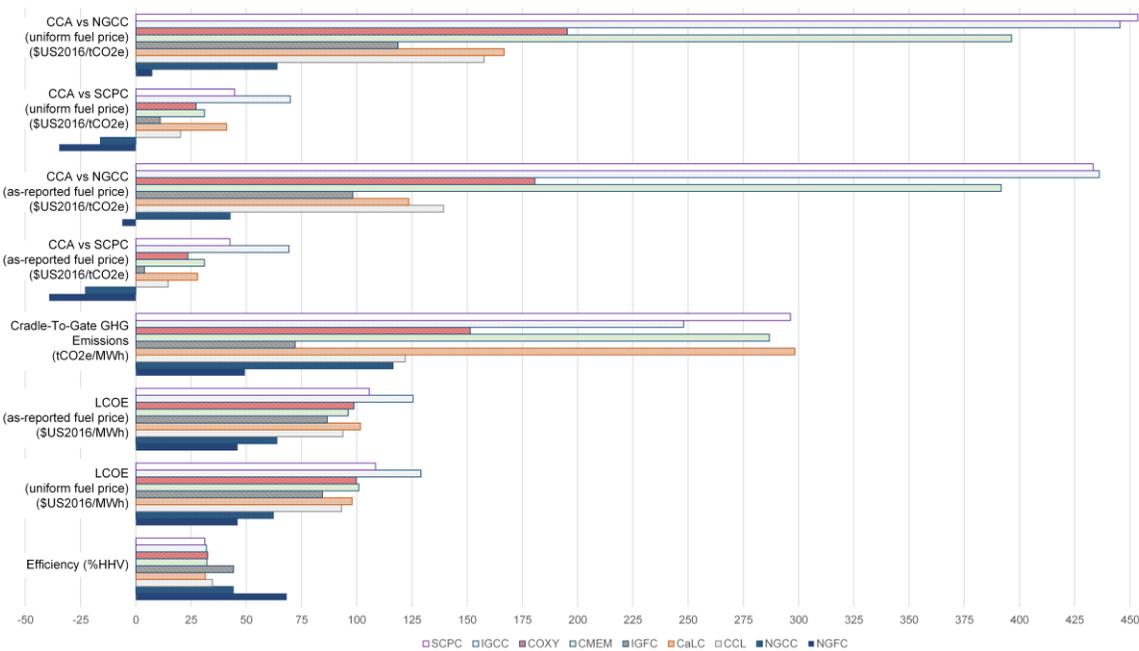
The reader is referred to the new supplementary data table for updates to Table 2 and 3.



Revised Figure 12. This figure is very similar to the original. The movement of the cartoon bubbles are negligible, except for the case of oxyfuels, which expanded somewhat due to the movement of the COXY-1 and COXY-2 datapoints.



Revised Figure 13. This figure is very similar to the original. The movement of the cartoon bubbles are negligible, except for the case of Oxyfuels, which expanded somewhat due to the movement of the COXY-1 and COXY-2 datapoints.



Revised Figure 15. This figure is very similar to the original. The CMEM and COXY CCA averages move by a small amount, but otherwise changes are mostly imperceptible and the relative ordering between categories remains unchanged.