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Interactive comment on "Timely estimates of India's annual and monthly fossil CO_2 emissions" *by* Robbie M. Andrew

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This paper is a timely consideration of a significant issue: the status, quality, timeliness and implications of India's greenhouse emissions data, with a very useful summary of the compoinent contributions and recent trends. It makes a valuable contribution and underscores the importance of making data available in a regular manner with sufficient detail to ensure its accuracy and reliability.

Specific comments:

Page 1 line 28: Given the size of some of the utility-scale PV plants, the term "small renewables" should be re-considered.

Page 1 lines 29-30: It might be worth including India's reverse auctions and innovations

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such as round-the-clock tenders in the list of contributory factors in renewables growth.

Page 1 lines 32-33: In addition to the limitations of the available data listed, it could be noted that official documents are maintained by different ministries and departments, which can also lead to outright inconsistencies between different official sources, such as disagreement between the CEA and the MOSPI Energy Statistics publication concerning the quantity of coal consumed for electricity generation in the three most recent years.

Page 3 line 3: The first statement should be qualified to acknowledge that monthly coal consumption figures for power generation are provided by the CEA.

Page 4 line 22 to page 5 line 7: The discussion of the seasonality of emissions is very important as it is such a strong factor in India's data. Accordingly, some extension of the discussion might be worthwhile, for example, to consider how monsoonal weather affects a) production and supply, hindered by weather affecting logistics, b) demand and consumption, for example decreased construction activity or abrupt decreases in air conditioning load as rains relieve extreme heat conditions that normally occur in May. In addition, the substantial increase in hydroelectric and wind generation that accompanies the monsoon and suppresses coal consumption could be noted here as well as on page 9. The benefit of an extended discussion is that it would guide readers who may wish to analyse seasonal changes in emissions in terms of other economic and meteorological data.

Page 6 lines 16-18: The apparent omission of power plant coal stockpile changes in the Energy Statistics publication might also be mentioned.

Page 10 lines 12-22: This paragraph considers data revisions and errors. Although it is correctly stated that coal statistics from CIL and SCCL undergo only minor corrections, it might be noted that data from captive power plants and other users are much more sporadic and provided only in summary form. Capturing total coal consumption could benefit from more systematic and timely data on non-CIL and non-SCCL data.

Page 11, lines 1-12. The Conclusions are entirely appropriate and relevant. Given the importance of timely and accurate data, and the multiple shortcomings noted in the body of the paper, a useful addition to this section could be a brief set of key recommendations that could guide efforts to better coordinate, accelerate and improve India's collation and publication of energy and related statistics.

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