

Interactive comment on “Perfluorocarbons in the global atmosphere: tetrafluoromethane, hexafluoroethane, and octafluoropropane” by J. Mühle et al.

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The Australian Aluminium Council (AAC) welcomes the opportunity to provide comment on this paper, which demonstrates a clear improvement in the measurement of key perfluorocarbons (PFCs) in the atmosphere. The presentation of atmospheric baseline growth rates from the 1970s across both hemispheres, along with pre-industrial background values for the three key PFCs serves to add to our understanding of global emissions trends for these important gases.

Whilst the data and methodology presented in the paper demonstrate an improvement and the measurement data appear robust, it is clear from the commentary through-

C2259

out the paper that there is still some way to go before we arrive at a comprehensive understanding of the relative contributions from the acknowledged PFC sources. It is, therefore, concerning that some of the author's statements regarding emission sources appear to be conjectural and hence detract from what should be the main focus of the paper: an improved understanding of the trends of global PFC emissions.

Rather than guessing at possible reasons for the reported gap between emissions as measured in this study and those reported by industry, it would be more useful if the paper placed more emphasis on the need to improve our understanding of emissions from all emitting industries. A first step would be to call for a greatly improved understanding of emissions from the semiconductor/electronics manufacturing sector – at least up to the level of reporting currently achieved by the global aluminium industry. Only then can a meaningful analysis be made regarding the reasons behind any observed differences between measured and reported emissions.

The AAC recommends that the authors review their discussion to eliminate conjecture and present a more balanced view, one that recognises the disparity that exists between emissions reporting amongst the recognised PFC emitting industries.

P 6507 Line 19: Typographical error – PFTB should read PFPB.

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