

## ***Interactive comment on “The problem of the second wind turbine – a note on a common but flawed wind power estimation method” by F. Gans et al.***

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*The paper by Gans et al. is a good paper because it firstly introduces the first law of thermodynamics into this debate (neglected by Archer et al., 2007 and many others, but not by others specifically mentioned in the paper and in reviews), and secondly it clarifies therewith that the wind energy potential is by no means indefinite. The responses by Bergmann and the anonymous reviewer are pertinent and have been taken on board by Gans et al. in their responses. The [...] response by Archer et al. has [...] one good point, namely the partial refilling of the wind energy potential by turbu-*

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*lence originating in the upper part of the turbulent planetary boundary layer. However, it does not admit that they have taken really wrong assumptions in their paper. [...] My recommendation: To be published after modifications proposed by the reviewers and already responded to by the authors, in addition using a less aggressive tone (totally flawed reminds one of G.W. Bush and the Kyoto Protocol) and maintaining that errors are contained in earlier papers. The paper could stimulate a large eddy simulation for the case under debate.*

We would like to thank the anonymous reviewer for the encouraging review. We have changed the conclusions of the manuscript according to the suggestions of the reviewer.

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