SCHOOL OF GEOGRAPHY AND THE ENVIRONMENT ENVIRONMENTAL CHANGE INSTITUTE

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To whom it may concern:

This is a letter of support for an NSF Sustainable Energy Pathways (SEP) proposal by Prof. Anthony Kuh and his group at the University of Hawaii at Manoa (UHM). We are researchers in the Lower Carbon Futures group of the Environmental Change Institute at the University of Oxford. Our research interests centre on how people learn about energy and the environment and apply what they have learned, and how energy technologies are adopted and adapted in practice.

Over the last three years we have worked alongside Matthias Fripp, one of the co-PIs on this proposal, at the Environmental Change Institute. We and Dr Fripp have come from opposite directions to the question of how best to help people learn about energy and adapt their behavior. Dr Fripp studies the technical and financial requirements for integrating large-scale wind and solar power, and has found that active engagement of electricity customers will be essential to achieving deep emission reductions at a low cost. In contrast, our focus has been on the sharing and adoption of energy advice in order to reduce consumers' energy bills and overall electricity consumption, and – more recently – to ease the integration of renewable power and distributed generation. These research threads come together in the NSF SEP smart microgrid proposal that Dr Fripp, Prof. Kuh and their colleagues are submitting. We welcome this opportunity to establish an international collaboration between Oxford University and the University of Hawaii, Manoa.

We look forward to developing collaborative research and educational opportunities for both our institutions in the area of customer engagement with energy information, including the distinct but overlapping roles of expert, novice, and organizational users. We are particularly interested in the opportunity to help shape studies and compare findings on novel methods of disseminating information to energy users, and to deepen understanding of hybrid demand-response systems which combine automation with user control.

We have a strong group in the Environmental Change Institute studying people, buildings and energy, and we collaborate locally with colleagues in Oxford's Transport Studies Unit, the departments of Engineering Sciences and Physics, the Smith School of Enterprise and the Environment, and the Oxford Institute for Energy Studies. This includes preliminary work on smart grids in relation to energy demand, and some ambitious plans for joint research efforts.

We will seek to setup brief exchange visits between our respective faculty and longer exchange visits (from a month to an academic year) for Ph.D. graduate students. Additional collaborations will occur through meeting at international conferences, organization of special sessions, and special targeted workshops on energy demand, smart grids and renewable energy.

We enthusiastically look forwards to building a collaborative research and educational program between Oxford University and the University of Hawaii in smart grids and energy demand.

Yours sincerely,

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Lower Carbon Futures, ECI