Dear Steve,
Sorry I can't make the meeting next week on energy efficiency in buildings.

I do have several suggestions of crosscutting activities that should be considered.

In the policy area there is no one who has done a broad scale study on the building energy sector similar to the MIT coal study or the MIT nuclear energy study. I suspect part of the reason is the difficulty in framing such a study; all the more reason to try and tackle the framing issues as part of such a study.

Some of the major goals that many federal and state governments and NGO's have adopted need serious study. They include the feasibility of requiring most new buildings to go all the way to zero net energy on site. Is this a more effective use of our resources than a more widespread development and application of integrated energy efficiency measures for new and existing buildings? Another example is the energy efficiency and CO2 impact of cool roofs retrofits of older buildings. Recent work we are doing suggests that increased insulation has a much larger impact on energy efficiency and global warming reduction.

DOE EERE has identified many of the specific technologies for buildings that should be addressed in their research program. However, the programs seem compartmentalized and many RFP's specifically prohibit crosscutting proposals that combine several technological areas. This discourages an integrated approach using several synergistic technologies, a necessity to meet ambitious efficiency levels. The program also has concentrated on high profile technologies while ignoring advances in more passive measures such as the increased use of daylighting and natural ventilation to provide efficiency and increased comfort and productivity.

I hope these comments will be useful in your review.

Sincerely,
Leon

Leon Glicksman
Professor of Building technology and mechanical Engineering
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