Title: Leveraging Evaluated Energy Efficiency Savings for GHG Reduction

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Abstract: There have been great improvements in deploying energy efficiency (EE) measures and projects across the US and EU in the past few decades. EE has been deployed in the US to reduce energy demand, while in the EU, EE is deployed to count and calculate GHG reductions. But a chasm exists in the US in leveraging evaluated EE demand savings for GHG reduction goals even though this is possible today. EE should be used to reduce demand and GHG across the US. There should be an established US approach for leveraging evaluated EE savings for GHG reduction given the substantial number of EE programs deployed and generating ongoing demand and GHG savings. An established EE GHG reduction approach would hasten the adoption of such standards across the states. This paper will provide important research on using evaluated EE savings for verifying carbon and GHG units through the Verified Carbon Standard Program (VCS) and similar voluntary carbon programs. Various pros and cons of these approaches will be outlined with specific examples of leveraging evaluated EE for GHG reduction. A specific focus on the EU's deployment of EE for GHG reduction will be used as a model for counting EE savings in the US – this will focus on leveraging EE for GHG goals among other similar accepted approaches and methods.

Initial analysis reveals:

- EU uses deployed EE for GHG reduction and that is a potential model for EE GHG savings in the US
- Many states require evaluation for counting EE demand savings, but few leverage EE for GHG reduction
- Example GHG reduction methodologies exist today in CA and the RGGI states (i.e., CT, DE, ME, MD, MA, NH, NJ, NY, RI and VT)
- Evaluation approaches exist today to count evaluated EE savings for carbon and GHG reduction
- Applying evaluated EE savings to calculating and counting GHG reduction is not done across the majority of states

Central to this analysis will be how to leverage evaluated EE savings and adapting those evaluations to GHG reduction requirements. Various recommendations will be detailed along with approaches to drive adoption across states. VCS and other carbon reduction programs will be discussed and applied to EE evaluations as examples. This paper will provide substantial detail on how the US and the EU approach the energy transition through EE deployment and how evaluation can be used to support GHG policies and goals in the US.