# Commissioning and Net Zero 

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#### Abstract

This presentation will discuss the importance of commissioning buildings, explain how cost effective commissioning can be built into a NetZero project and explore some 'home run' type situations where commissioning can be used to amplify the gains from standard energy efficiency measures.

The presentation will be split into three sections, the first will focus on common commissioning discoveries on high efficiency systems typical of what might be seen in a NetZero project with some brief discussion about the potential impact of each discovery. The second will focus on characteristics of NetZero and Passive Hous projects and how those lend themselves to being commissioned. The third will examine ways that commissioning can be used in conjunction with other energy reduction and savings verification strategies, such as $\mathrm{M}+\mathrm{V}$, to achieve greater savings and provide a level of assurance that results are being reported and collected accurately.

Each section will include specific real life examples and if time allows, we will conclude with an interactive session allowing the audience to try their hand at identifying commissioning issues from select project photos.


## BIOGRAPHY

Lou Vogel and Nate Goodell are members of the Taitem Engineering Commissioning department and have commissioned over 2 million square feet of projects together. Lou is currently the president of Taitem and among his other accomplishments led the team that developed the Energy Star for Multifamily Housing label for NYSERDA on behalf of the U.S. Department of Energy. Nate is a senior engineer and works primarily as a commissioning agent but is also involved in Taitem's M+V work. Both are Certified Commissioning Professionals through the BCA and Existing Building Commissioning Professionals through AEE.

