Energy Efficient Buildings in Bhutan

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***Abstract*- Due to poor design and almost non-existing insulation in the homes, the energy consumption reaches its peak during winter in the country. There is a need to construct energy-efficiency buildings to help reduce greenhouse gas emission. This paper presents whether the selected ECE building (new academic building in Jigme Namgyel Engineering college) is energy efficient or not. The focus is on the heating and cooling of the building for better temperature to live in. In this paper, Open-Studio and Google Sketch-up software are used for the simulation. The sample building selected here is a new academic building in Jigme Namgyel Engineering College (JNEC).**

Keywords - heating degree days, cooling degree days, OpenStudio