**Lesson learned from MPC**

I implemented the MPC controller for minimizing energy for a building. Although the model works and the validation shows our results are fine, several problems still exists:

* I need to run EnergyPlus after each iteration of MPC and update previous state of the system (Previous temperature)
  + Eppy and Python Plugin
    - I was able to edit python plugin, but EPPY has a problem of installation (run as administrator and check the packages again).
  + Python API, check how to add a code beside of the program
* A simple regression model does not necessarily represent the thermodynamic behavior of the building. I need more advance models:
  + black-box model
    - ANN
  + grey-box models
    - Bayesian Network Model
    - RC model
* Check the literature and check the numbers and charts with other papers

I need to improve my writing and work on it. It is very important and it needs a huge amount of work that has to been done routinely.