



My Energy Journey

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<http://www.ck-wong.ca/Energy/My%20energy%20journey%2020050907.pdf>

Introduction

1974 is a pivotal year for me personally. After working 3 year almost 16 hours a day and 365 days a year, I saved enough money for one year of expense to study in Canada. The journey started one year early when I was looking for the right university. If you are old enough you would remember the 1970 energy crisis when the Arabs imposed the oil embargo for a few months that caused the gasoline price spiked and everyone worry on the recession. I was also fascinated by the importance of energy. By that time, solar energy was emerging but very costly. Other than that there was not much about energy. Lacking knowledge did not deter my inclination of energy study. I inquired MacMaster, McGill, Toronto and Queens for the possibility of enrolled into the energy engineering discipline. The short version of story was no response from anyone.

Time has passed. When I was studying in Waterloo, I asked the question again. And again I got the look from people. I am very happy to see that there is such discipline exists. Energy Engineer should be a graduate study rather than a undergrad study. The discipline is not just complicate but also involves a broad spectrum of technologies. It should cover from mechanical & electrical (generator), electronic (solar), chemical (combustion), physics (nucleus) and many others. Undergrad student will not able to jam all into their program. I see energy engineering like the medical school. You need the foundation before you could combine the knowledge to engineering the energy.

One could argue why not specialize in one are such as hydro generator. Energy engineering is not to focus in one area but look at the use of energy from a big picture. Only from the big picture one could beneficial from it. For example, one has to master the mechanic of a conventional combustion engine and the electric motor to create the hybrid car. I would agree that there will be a lot of specialization which covers a few areas only. But the idea to engineer multiple disciplines to gain maximum profit is the essence of the training.

I would like to devote some time to explore how we could harness the energy and broadcast some advance energy research and study.