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## TOPIC 5#

According to experts earth has exceeded four of the nine limits for hospitable life and it is very close to reach the remaining five. The four issues consist climate change, extinction of species, addition of phosphorous and nitrogen to the world's ecosystems and deforestation. Consequently there is an imperative need for humanity to meet its needs of the present without compromising the future needs that new generations would have. This is called sustainability and from the ecology point of view is the study of how natural systems function, remain diverse and produce everything it needs for ecology to remain balance. In my point of view it is of great of importance that engineers have to play the major role to solve the sustainability issues that emerge. Therefore, as a future electrical engineer I could safely say that I would be dealing with lot of significant issues that needs to be solved.

Sustainable development is not an easy goal to achieve. Technology is a major tool to reach that goal. More specifically technology influences a lot the sustainability of the society. As a power electric engineer there are several things that I could possibly work with and can very much change the society in a positive manner. The evolution of technology made possible reducing the power consumption by using electronic devices. Last years the installations of renewable energies change the scenery of electrical energy production. In households and businesses also renewable energies are already implemented. The sustainable housing is one of the things that I could possibly work on. Smart households are introduced the last several years, which consume electricity as well as produce and feed back to the grid. In that way smart households have independency from the main grid and that increases the security and efficiency. Furthermore, most importantly is that these changes in society clay awareness about the environmental issues and motivates them to act more sustainable in their everyday lives.

The course material it was an educational tool and gave an holistic view of the current problem and provided awareness. In these study the present day was examined which is the foundation to understand the problem. The current situation of our planet and society was introduced and arose the question of what that situation means to the individuals as well as companies. The importance of nature was underlined which provides material resources, regulated the climate and provides ecosystem services. The upcoming future was discussed where in order to achieve a sustainable society people as well as companies have to act collectively and act upon that problem everyday. The whole presentation increases my concerns and thoughts about several things relevant to the planets and society problems. The most important thing is to choose my job occupation accordingly to help solve these problems. I have the need to seek for a job where provides sustainability solutions and in the end make the world a better place. Another realization that I had is that everyone, of us has to be aware to consume services instead of physical products. When we purchase products we have to consider their impacts during production.

The syllabus of power electric engineering master program here in KTH has direct or indirect relevance to sustainability issues. I have been taught many subjects that promote cooperation in groups with other students, on a common goal, which is something course material suggested.