

## Topic 5

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I think the sustainability issues is very important for us engineers in the future. As we are electric power engineer. Our work is mainly about the electricity, which is one of the most important thing in modern world. Nearly everyone and everything cannot be separated from the electricity. The electricity is mostly from carbon, nature gas and oil which are from the nature and nonrenewable. These kind of energy will be used out one day in the future. We have to try to some sustainable way to solve this problem. To use more renewable energy, and make is more efficient. We cannot imagine how the world would look like if we lose the electricity in the future. So the sustainability is very important for us as an electrical engineer and I believe it will also be the main problem we have to work on in the future. For me most of my courses are about electric power system. I am still not sure which technology I will work for in the future. But there are already some technologies I have learned from the courses, like the operation of the system, the wind power, the smart grid. I am also taking a project courses, the topic of our group is about the electrical vehicle. These technologies all have great influence on the sustainability of the society. Frist the wind power is a kind of renewable energy, in the future if we can try to raise the efficiency of the wind power plant than we can save more fossil energy of course the sustainability will be raised as well. Then the smart grid is try to make the whole power system more efficient. The operation and planning of the system is trying to make good plan for different kinds of power plant trying to use more renewable energy instead of the fossil energy. Finally the electric vehicle will take place of normal cars. It will raise the utilization of the energy. And will also reduce the air pollution. From the material I learned that everyone and each small action all have an influence on the sustainability of the society. So I will think more about that during my future life. Besides that I also learned a lot of new knowledges which can be applied in my future work. Like the concept of footprint mentioned in the course material. Actually as I know the footprint is also used as an index in some research about the implement or planning of the renewable energy. What I learned in KTH now is also trying to increase the sustainability of the society. Like the wind power, solar power also the electrical vehicle and the smart grid. Nearly all I am studying is trying to make our society more sustainable. So I have to say KTH really has done a lot to make us prepare for the future work with the sustainability, not only on the technical part but also trying to make us be aware of the importance of the sustainability of the society.