

Topic 5

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Transforming today's unsustainable society into to a sustainable situation is a very complicated process that will take a long time. Therefore, the environmental impacts will probably continue to get even worse and that will result in an increased focus on the sustainability. As an engineer I think that we will notice this increased focus clearly since we will be working with designing/developing components and systems. If the focus on the sustainability issue increase, this will be clearly noticed in our future works because a solution which is not sustainable from an environmental aspect would not be considered good. The obvious part of this is that designs and solutions should minimize the usage of fossil fuels, and other substances which endanger the environment. More specific task for an electrical power engineer are, for example: designing system with the purpose of phasing out all power plants based on fossil fuels and replacing them with renewable sources; Trying to increase the life time of equipment in the power system in order to minimize material usage; Making sure that current used substances in the power system equipment, which endanger the environment, can be replaced with new sustainable solutions. Solving these problem is a very important task, that needs a lot spent resources all over the world. Not doing this could have severe well known consequences on large areas all over the globe. Fortunately, there are strong economic causes which make companies to work with sustainability and, hopefully, will the problems be solved because of this economic reasons. Apart of this, I also think that as an engineer we will be in a position at our future companies to affect how the company is ran. With this ability, we should of course strive to make our companies to focus on the sustainability and try to make sure that the companies buy services and goods from other business that work with sustainability, which includes both environmental and social aspects. It is my opinion that the social aspects is just as important as the environmental and they should not be forgotten.

The material in this course regarding the environmental development was far from something new and I believe that the majority of us have been in contact with these topics before, in specific courses with much deeper insight. Because of these previous courses (not this short test), I believe that we are well prepared for working with sustainability. This is an important area that can be related to a considerable part of what we have learned at KTH. I also think that all courses at our masters programme are highly related to the sustainable topic. This is because we are working with the energy system, and as long as the energy system is not 100 percent dependent on renewable sources, the energy resources will eventually run out.