

Topic 5: Sustainability

Society has in more recent times developed concerns regarding environmental impacts of humans. At the forefront of the push for reducing impact is sustainability. It is by limiting our consumption to ensure that the production can keep up. In a more environmental scenario, the aim is to adjust our behaviour such that it is possible to continue along with same working methods indefinitely.

As an engineer moving to the industry soon, sustainability will be of major concern and big factor in my decisions and in the aims of most companies, as a secondary to maximising their profits. To appease stakeholders and customers, the company must hold up its reputation and be a responsible part of human society and abide by our ethics as such. To build upon these reasons, I as an engineer would have to uphold them in my work, and therefore I would play a significant role as an instigator of new technology, designs and methods to factor sustainability and how it would affect my work.

I hope to personally pursue a career in generation and with the current trend in market of moving towards renewable energy and smart grid technologies, it will promote further sustainability through efficient use of existing system in the form of the smart grid technologies, lowering impact indirectly on the environment and hence making the power system more sustainable. Furthermore renewable energy directly results in a more sustainable power system through the reduction of non-renewable energy generation methods.

The course material has taught foremost the ability to reflect upon my actions and furthermore to assess how my decisions can lead to certain impacts. The ability to assess my decisions and actions before executing them strives to better myself as an engineer and allow me to make accurate decisions in regards to my future development and in regards to the projects I will complete in the work place. In addition to this, the course provided the opportunity to reflect upon other people's thoughts how they would integrate with my own and to expand my way of thinking through adapting their ideas. Exposure to other people's thinking process enables me to better prepare myself for group projects that would certainly occur in my future career.

The course material relates very closely to what was studied throughout the program at KTH. It resonates along the same lines as are taught by the other courses and how it is more beneficial in the future to pursue a stable and sustainable model that's based on renewable energy and well integrated and efficient power system. That is achieved through advancing renewable technologies and information and communication systems that'll give a rise to smart grid technologies. Furthermore, the focus on sustainability is emphasised through the current running PhD and Master Thesis projects in the department.

I believe KTH does more than enough to promote sustainability in engineering, we have had a number of courses emphasising the benefits of sustainability in power systems. Perhaps, some courses focusing on critical assessment of how much of an impact certain technologies have on the environment could help provide further insight.