In my future role as an Electric Power Engineer, sustainability will be an important aspect since it is concerned with the survival of the human race on the planet. The ability of the earth to support human life for the coming generations largely depends on the amount of pressure humans exert on the earth's resources currently and within a couple of years to come. The earth will only be able to support human life if its resources are managed in such a way that they do not run out in the coming years.

All human activities on the planet today require some form of energy to progress. The earth provides different forms of energy to support man's activities. These different forms of energy manifest as either renewable such as wind or non-renewable forms such as fossil fuels.

Technology plays a big role through enabling the shift of focus from non-renewable energy sources to renewable energy sources. The development of technologies to improve the efficiency of harnessing energy from renewable sources will further reduce reliance on non-renewable sources thereby greatly increasing the amount of energy resource that will be available for the generations to come.

The transmission and distribution of electrical energy from the generation points to the consumption points is an important issue. With inefficient transmission and distribution systems, large amounts of energy are lost at this stage. Furthermore, expensive transmission and distribution systems contribute to high prices of electrical energy, making it less affordable for some sections of society in the world, thereby encouraging the use of alternative forms of energy that may be detrimental to the environment and therefore not sustainable. The development of more efficient and cheaper transmission and distribution technologies will not only result in reduced losses and costs, but also allow the transportation of energy from very remote places such as off-shore wind farms.

With the advancement of consumer technologies, the utilisation of energy resources by humans for production and at household lever can be made more efficient such that less energy is wasted, thereby allowing the available energy resource to serve longer and therefore ensure sustainability. The use of more efficient equipment is therefore important for human survival on earth in the years to come.

As a student at KTH, I have learnt to appreciate the importance of sustainability. By sensitising the people around me on the significance of a sustainable lifestyle while at the same time leading an exemplary lifestyle, I can have an impact on the sustainability of human life on the planet by encouraging those around me to lead sustainable lifestyles.

With my knowledge of basic energy consumption of household equipment, I am also able to educate people in my immediate community on simple energy conservation techniques in an ordinary household. This can go a long way in promoting sustainability since such simple techniques have the potential to spread among several individuals.

On a more advanced front, as an educated professional in the electrical engineering field, I am charged with the finding better ways of utilising the currently available sources of energy at the various stages. This includes the improvement of the efficiency of energy conversion methods for electricity generation from renewable energy resources, improved transmission and distribution efficiency and more energy efficient consumer equipment.

Although I have learnt to appreciate the importance of sustainability at KTH, my education at KTH has largely focussed on my field of study with little emphasis on issues of sustainability. However, the high importance attached to sustainability is evident in other events such as seminars and guest lectures within some of my courses. Since the education at KTH is mainly focussed on imparting technical expertise, not much emphasis is placed on preparing one to work with sustainability.