

The Environment and Sustainable Development

Before we ask ourselves about the importance of sustainability for the future, we must ask what does a sustainable future mean. I would define sustainability as a kind of discipline that allows us as an individual to have a balance between nature. Sustainability is an ability or capacity of something to be maintained or to sustain itself with the nature. Sustainability is about taking what we really need to live now, without risk the potential for people in the future to meet their needs. If we do not take our action about future sustainability serious, we will be responsible for rising seas, raging storms, ferocious fires and punishing floods. It threatens our health, communities, economy, and national security. By maintaining or improving human well-being and living conditions, we can keep an ecosystem that benefits us humans. There are services that require management, such as pollinating insects, protection against natural disasters, water treatment, reduction of particle levels and greenhouse gases.

For me it is obvious to become an electrical power engineer when I know that we are one of the bases for our future. As we face planetary issues such as global warming, biodiversity loss and urban migration. The engineering profession has a significant part to play in affecting the future of our planet. I think that sustainability issues will be a big part of my future role as an engineer. It is important for me to maintain the quality and future issues. We are living in a world where consumers consume many natural resources every day. We use current to keep our streets and buildings lit, power our appliances and household power needs. It is critical that power electrical engineering is equipped with the relevant knowledge and skills to effectively address such challenges in society. In order to preserve nature and man in balance, it is important that I as a power electrical engineer meet the criteria for a greener future.

I think that the technology that I will work with will influence the sustainability of the society. I really hope that I can take a part of a futuristic advance development at a reasonable high-tech company, a corporation where improvement for a better world is the main purpose. It would be a privilege to be a part of a research about high-tech electronics products. If I get the opportunity, I want to optimise energy management and improve the energetic efficiency of the systems all along their life thanks to eco-design. These objects can be accomplished modeling, design and new functionalities. This can be possible by optimizing the design of an electric machine to reduce environmental impact or to design storage to a photovoltaic farm.

I think that knowledge and skills about sustainable development covers information that is highly specific to the relevant engineering discipline, to concepts that overarch all disciplines. For instance, Power System Protection and Wind Power System courses. I find these courses to be important because I think that people need protection from danger of shocks, burns, explosions and that the earth needs someone who can take care of it instead of damaging it with CO₂ emissions. I find that it is essential as an engineer to think of people's safety and the environment. Over the past five decades, we have affected our planet more quickly and more than ever in human history. This has had its consequences, such as chemical pollution, ocean acidification and lack of fresh water. The irony is that we live in a world where a large population is overweight while there is a long-population starves.

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I think it is important that everyone should have the possibilities to live a good and healthy life. Everyone should be able to get food, fair treated, be healthy, get free expression, access to electricity and obviously get clean water. As an electric power engineer, I can contribute to the consumption and production is optimized so that everyone can get electricity.

I am happy for taking apart of the future. This would not happen if KTH (or Sweden) did not give me the possibilities to study. KTH's courses are organizing enough to prepare me for working with sustainability. It feels like KTH has as a base to teach students to think critically and futuristic. All courses are geared toward the future and a sustainable future.