Detailed Study Plan

I was smitten by Power and Energy during my Bachelors in Electrical Engineering (a slightly more general area of study) from the University of Engineering and Technology, Lahore, Pakistan. My motivation for pursuing a postgraduate degree results from a mixture of a feeling of awe at how the energy sector is shaping up for the future, as well as my longing to guide my country through the dismal energy crisis it has faced for a whole decade, into an era of green, affordable and sufficient energy.

Pakistan currently faces a huge energy deficit. In a world driven solely by energy, this has naturally had a crippling impact on all spheres of life in the country. Lack of fuel for heating and the fleeting nature of electricity supply are regular topics of household discussion. Industrialists have been forced to move to greener pastures abroad as they find it tougher and tougher to profit from their investments.

In the light of these developments, and others, it is the need of the hour to turn to more sustainable forms of energy to drive the county out of the dark. However, since this is a relatively new area for the country, Pakistan lacks people with skill level to come up with a sustainable energy network. The energy sector in Pakistan has traditionally been identified as a department that has little room for innovation or new technologies.

This is primarily the reason I aim to continue my studies in the field of energy. I aim to focus on modern energy technologies as well as the economic aspect of energy in the international market. Having been employed in the Power Sector of Pakistan since July 2016, I have had direct exposure to the problems faced by the sector. I believe in a multifaceted approach to the prevailing crisis. It has been made quite clear to me that even though adding Megawatts of electricity is one aspect of the solution, the smart way forward for Pakistan is to create a culture of modern techniques that encompass the entire energy sector, not just the power sector (a subset of the former). A culture that emphasizes Energy Conservation, Energy Efficiency and the smart generation, transportation and use of energy as much as the availability of fuel in abundance. My preferred course would be one that allows me a detailed study of all these aspects of the field of Energy. As a Fulbright Scholar, I would look forward to picking the brains of the best energy experts of the world, to come up with ways to encourage such a culture here at home.

My undergraduate research project was based on the impact of integrating renewable energy in the grid and I plan to add further value to it from my academic experience in the USA. I feel that Pakistan stands to benefit a lot from investing on a sustainable energy future as the efforts of the world realign towards the goal of carbon neutrality – incidentally Pakistan has only recently ratified the Paris agreement for climate change.

There is a need for motivated bodies and innovative heads in the energy sector of Pakistan. I believe that I can answer to that need suitably and be a part of the team that attempts to banish the dark clouds surrounding Pakistan. However clichéd the word 'potential' has become, I still believe in associating this word with my country. I believe we have the requisite resources to attain energy sufficiency, not immediately, but eventually.

I aim to be involved in the energy policy-making, with my understanding of modern energy concepts. I have eyed a position in the Alternative Energy Development Board (AEDB), which works under the Ministry of Water and Power, Pakistan. Such a position will allow me to formulate a concrete plan to drive Pakistan's energy market into a future of sustainability, modernity and, most importantly, sufficiency.

There is a lot to be done, and very few people to do it so far. However, optimism is high as the country's leaders recognize its problems and are showing a willingness to confront them head-on.

I look to the Land of Opportunities for my postgraduate degree due to the lack, in both quantity and quality, of such specialized programs in Pakistan. I believe that the exposure of a Fulbright Award, will enable me to be in a better position to propose a solution to the situation back home. Here's to a prosperous Pakistan that lives up to the green color of its flag.

Ahmad Usman Khan 8th May, 2017