

Statement of Purpose

My name is KHUN Hanuman. I'm 20 years old. I'm studying at Institute of Technology of Cambodia (ITC) and now I have just finished my second foundation year. When I was in Primary-School I really had a passion on scientific knowledge, automation, Energy, power and environment. When I finished from my High-School I always consider on my major that I should choose and university that fit for my major and my goal. Moreover, I am really preferred on mathematic and physic since at the high school. So, for my considering and presentation from my teacher and from alumni, I decided to choose ITC and took entrance exam because it is one of the best engineering School in Cambodia. Currently, I am choosing to study in Mechanic and Industrial Engineering(GIM). Addition, GIM also have a study in renewable and sustainable energy that make me being interested. In addition, it's required analyzing with mathematics and physics for applied in smart grid, thermal, and optimizing in mechanical turbine power plant system.

While my country is developing, I have always been concerned about the problem of pollution though transportation, power industrial and manufacturing. So, the main reason why I am very ambitious to deepen and expertise on renewable and sustainable energy for reducing air pollution, global warming, global e-waste, system ecology and environment. Moreover, it provides golden opportunity for researching and optimizing for mechanical gas turbine power plant. Especially, in my environment I always see a lot of resources such as vibration from water(wave), air, waste, lightning, etc. Immediately, renewable energy is energy derived from natural resource but it's all not made for sustainable. So, for my immediate professional goat I am really passionate on deepen study and research on green energy (Clean energy) such as biomass, solar system, hydroelectrical, geothermal, wind turbine and emerging source that is replenishable safe for environment and available in long-term. In addition, base-on my major I am living in the revolution the complex systems of our energy supply where the environment full of using fossil fuel in transportation, handicraft sector and industrial addition drainage of wastewater into water sources that makes me worry about the fate of the planet. In this field, I plan to do research on sustainable energy by designing a solution and developing for decreasing toxic energy and radiation for inhabitant in Cambodia and people around the world. So, that is the main reason why I want to study in depth in this energy sector to contribute to reducing pollution, share energy knowledge and contribute to economic and environmental development.

Upon completing my foundation year in freshman, I did not have enough time for internships but when I was studying in second because of my passion for physics and mathematics, I decided to be volunteer to teach and lead out in physic about fundamental in Mechanic I and Thermodynamic. Especially, it gave me a lot experiences in this opportunity and some method for solving physics problem. In addition, in this field I can learn about technical of problem solving and improvement for myself such as communication, confident, flexible analyst, phenomenon and strengthen in physic. In my spare time I also have a group study in purpose of sharing experience, teaching lesson, self-improvement and we also prepare for some examination. Especially, all of us also have a plan to study abroad together.

Pursing in PhD in the energy filed is a vital step toward addressing in the global energy transition. By specializing in this field, it can make me deepen my knowledge and concentration on renewable energy system, particularly advancing project or cutting-edge facilities and a collaborative environment for reducing our reliance on fossil fuels and mitigating climate change. As advanced, it's also an approach to solve real-world energy problem, energy efficiency and environmental problem. For my perspective, I have looked in several factors around ten years ago for some waste,

nuclear waste, carbon emission and smoke fusion that were the big problems in Cambodia and other countries. So, for my decision to pursue in PhD education will give me a lot opportunities for specialized expertise that critical for addressing complex energy challenges and contributing to innovation solution. In addition, it also makes impact on society and environment such as solving and converting to clean energy, recycle for distribution and smart grid, development of sustainable energy solution, reduce energy costs and prove energy access for communities worldwide in the future. Looking ahead, I have a plan to come back to my or development renewable infrastructure such as solar system, biomass, wind turbine and hydro-electrical, etc. Additionally in Cambodia, I need to create a strategic plan for transition from fossil fuel power to renewable energy source and reducing dependence imported fuels, enhancing on energy security and responsibility to take care of this planet. Moreover, I also want to be a professor in this field because I am really pleased to share my experience and my knowledge for Cambodia Generation in energy field for real-world energy for improvement in economically and environmentally in Cambodia toward sustainability.

My decision to pursue higher education in France because France is the country distinguished academic excellence, the innovative research opportunity and the cultural vibrancy that complement my educational and my professional goals. Addition, France has a lot mathematicians, physician, physiologist and a global leader environmentally sustainable, promoting renewable energy, reducing carbon emission and conserving natural resource. Furthermore, she also commitment in environmental sustainability, energy and power sustainability and high-quality education and supportive environment for career development. That is the main reason why I am really impressed with France and choose to study abroad in energy and power field that the golden opportunity for study, work and research. Currently, ITC has a partnership with Institute Polytechnique des Paris, which further strengthens my resolve to apply. During my sophomore year, I saw my senior was passing in Institute Polytechnique de Paris (IP Paris) and webinar by Association Polytechniciens Khmers (AXK) that they gave a presentation for preparation and process of oral exam in ITC and also by google meeting. Especially information, they were presentation about education system and environmental, opportunity and achievement for student in Grandes école for 5 universities and include a new école is École National des Ponts et Chaussées. As I know in 6 universities in IP Paris, I really impression with curriculum of L'École Polytechnique de Paris (L'X) that have high education system and reputation. Furthermore, students that get graduated from L'X have good credit and opportunities to work and research. Addition, I am eager to embark on this journey and confident that L'X will be the perfect environment to help me achieve my aspiration for study in energy field of cycle engineering.

In conclusion, choosing for study in France will give me a lot opportunities and world-class education system. Especially, I really want to study in L'X that I believe that she will be a new life journey to fulfills my dream to be expertise on renewable and sustainable energy and I commitment for find a new solution and development in economic, environment and reduce pollution to the planet.