

## Leadership Experience

Growing up in a developing country, I learned the importance of guidance, resilience, and innovation. Leadership to me is harmony in action, such as an engineer, aligning all the moving parts of a machine into motion for best performance. As Simon Sinek said, "Leadership is not about being in charge. It is about taking care of those in your charge." I have brought this mentality of being a mentor to my academic and professional journey.

To enhance my leadership, I enrolled in a number of courses including Lean Six Sigma and 5S Fundamentals. My goal was not only to learn, but to share. In my university years, I observed classmates and juniors struggling with technical subjects. I had strong knowledge, as I had already completed a Diploma of Associate Engineering. So I provided assistance to them. Such sessions were productive. A few students got better grades and some even got admission in foreign universities. Their development made me realize that leadership is about helping others to succeed.

In my professional practice, I was tasked to lead our ISO 50001 certification project to obtain a solar grant from UNIDO. Being a Process Engineer, I initiated the energy efficiency enhancement with both small changes and significant upgrades. I coordinated cross-departmental meetings, conducted training sessions, and guided energy efficiency improvements. In December 2023, we achieved certification with outstanding results, earning recognition from senior management.

These experiences shaped my leadership style, rooted in empowerment, problem-solving, and continuous learning. My vision is to lead by empowering others to perform at their best and to create leaders rather than followers. Through a Master's in Sustainability with Chevening, I aim to strengthen this philosophy and apply it to advance Pakistan's sustainable industrial transformation with efficiency and environmental responsibility.

## Network

Connecting with like-minded people is not only about career growth and the exchange of ideas but also about building bridges between people of different backgrounds, disciplines, and cultures. Meaningful connections expand perspectives and open opportunities for shared progress.

During my academic journey, I actively participated in competitions that required teamwork, problem-solving, and collaboration with students from other institutions. Events like bridge building, water rocket, and debate competitions gave me opportunities to interact with diverse academic communities. Later in university, I advanced this idea by creating a team named “Healer” to represent my university in inter-university competitions. These experiences boosted my confidence, improved my communication skills, and expanded my network of peers across different disciplines.

In my professional career, my network grew even further. I collaborated with cross-functional teams, vendors, and international experts while working on projects. For example, during a maintenance visit from GEA, a German engineering company, I exchanged ideas on local energy challenges and innovative solutions. Similarly, while working with Chinese engineers on the installation of a spiral freezer in March 2025, I gained valuable insights into advanced technical processes and global best practices. I have maintained contact with these professionals via LinkedIn and email, often exchanging knowledge and seeking guidance.

Networking has consistently opened doors for me to learn, adapt, and contribute. Through Chevening, I hope to expand this network globally, engaging with professionals and researchers who share my passion for sustainability and innovation. I also look forward to contributing by sharing my own research and practical experiences, enriching Chevening’s vibrant community of scholars. These global connections will empower me to bring progressive solutions to Pakistan’s industrial sector, foster sustainable growth, and promote environmental responsibility.

## Course

My desire to pursue a Master of Sustainability and Renewable Energy is based on a strong enthusiasm to find practical solutions to enhance efficiency in industries. My professional experience has already provided me with an excellent background in this field. Being the leader of the implementation project of ISO 50001, I got to know the power of systematic energy management. I also noted the contribution of small alterations and strategic additions to reduce energy consumption, minimize costs and inspire sustainable practices across industries. The experience convinced me that sustainability is not just a notion but a necessity in industries. This has a direct correlation to the UK's focus on meeting the climate responsibilities.

Besides work, I have research concepts indicative of my innovation ambition. One such proposal includes the production of eco-friendly lubricants using sunflower oil and nanoparticles of zinc oxide, as an alternative to petroleum products, and converting the sunflower waste into biogas. The project matches industrial needs with sustainable options.

My first choice to pursue this vision is the University of Aberdeen. With an unconditional offer letter in hand, I am inspired by its QS ranking of 83 for Environmental Sustainability. It offers both academic excellence and practical exposure. Its focus on renewable energy, carbon management, and sustainable development, combined with its location in a hub of energy transition, makes it an ideal place to study. This environment will help me turn my experiences into meaningful expertise.

After completing my degree, I plan to return and apply this knowledge by leading renewable energy integration and green manufacturing initiatives. My vision is to foster a sustainable ecosystem that balances resource efficiency with innovation, reduces reliance on fossil fuels, and positions Pakistan as a leading example of responsible growth.

## Career

Despite contributing less than 1.5% of global emissions, Pakistan is among the countries most affected by climate change. Ranked first in Germanwatch's 2025 Climate Risk Index due to the devastating floods of 2022, the country faces rising temperatures, water scarcity, and extreme weather. These challenges threaten food security, infrastructure, and the lives of millions, making sustainable development an urgent necessity.

After completing my Master's in Sustainability, I intend to return and focus on renewable energy and green manufacturing projects. Building on my experience with ISO 50001 certification, I aim to introduce energy-efficient systems, reduce industrial waste, and promote practices that both minimize costs and protect the environment.

In the medium term, I hope to collaborate with government bodies such as the Ministry of Planning, Development, and Special Initiatives. By modernizing policies and creating cross-industry platforms, I hope to encourage sustainable practices on a larger scale. Alongside this, I want to mentor young engineers and foster knowledge-sharing communities that drive innovation and awareness.

I have a long-term vision of creating green industrial zones powered by renewable energy. Such hubs will reduce waste, increase output, reduce carbon footprints, and embrace responsible development. Such clusters may serve as examples of sustainable industrial transformation and the development that is resource-efficient by encouraging regional collaboration in South Asia.

Issues like financial barriers, change resistance, and lack of awareness will continue to emerge, although I believe that they can be solved with evidence-based solutions, stakeholder involvement, and international best practices. Chevening will equip me with leadership, global contacts and technical knowledge to make this vision come true. Ultimately, I aim to make a contribution towards the resilient development of Pakistan and transform it into a leader in sustainable industrial growth.