



Prof. Feridun Hamdullahpur

University of Waterloo, Canada Former president and vice-chancellor (2010-2021),

Keynote Presentation Title

"The Evolving Tension between Energy and Attaining Sustainability: An Overview"



(GMT+3)

Abstract

- 1. Historic background:
 - a. First power plants...steam/coal powered-Their growth in utilization/usage
 - b. CO2 change (need to find data that goes back to first steam plants and shows a correlation..)
- 2. Era of other (non-fossil) contributors mainly hydro and nuclear
 - a. How did they start?
 - b. Where do they stand now? Is there a significant role for them to play now?
- 3. Era of new renewable developments: Wind, solar, Fuel cells, storage....
- 4. Are we generating and consuming wisely? Role of networks and grids
- 5. Can Natural gas be taken out of the fossil fuel category (at least temporarily) and made part of a solution?
- 6. Future role of oil and petrochemicals
- 7. A snapshot of today's situation: How close and how far are we towards achieving 2050 goals?
- 8. Is there a room to introduce other sustainable solutions?



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Biography

Feridun Hamdullahpur, was the University of Waterloo's sixth president and vice-chancellor (2021-2010) and has been an engineer, educator and leader over the span of his career in research and higher education. A professor of mechanical engineering, Professor Hamdullahpur holds a PhD in chemical engineering from the Technical University of Nova Scotia after earning bachelor's and master's degrees in mechanical engineering from the Technical University of Istanbul. Throughout his career, Professor Hamdullahpur has been an active researcher in thermo-fluids and energy engineering, a passionate teacher and an academic administrator. He has authored hundreds of scientific and academic publications and supervised over 50 graduate students. He was named a Fellow of the Canadian Academy of Engineering in 2014. He has served in various academic and administrative roles, including as a vice-president academic and provost at the University of Waterloo. Professor Hamdullahpur was named a Specially Elected Fellow of the Royal Society of Canada (RSC) in 2018. This designation recognizes individuals who have made exceptionally valuable contributions to promoting the objectives of the RSC in ways that contribute significantly to Canadian society. In acknowledgment of Professor Hamdullahpur's leadership in education and innovation, he was awarded the Queen Elizabeth II Diamond Jubilee Medal in January 2013.