

UNIVERSITY OF ALBERTA – FUTURE ENERGY SYSTEMS SYSTEM-WIDE

\$2.8M in research funding to 2023

9 active system-wide projects

9 Principal Investigators and Co-Investigators

34 students & post-doctoral fellows

ANALYZING THE ENERGY SYSTEM

Changing how we power our society can have countless economic, social, and environmental effects. Costs may increase, unexpected emissions may occur, and jobs may be created or lost. It is essential for decision makers to understand the potential system-wide impacts of the renewable energy transition in the near future and further, identifying and analyzing the tradeoffs associated with different futures, so they can be accounted for in planning and policy. State-of-the-art modeling and simulation tools, along with cutting edge political science and economic policy analysis, can help identify both benefits and unintended consequences.

CURRENT RESEARCH PROJECTS

Assessing Political Pathways for Energy Transition

Principal Investigator: [Lori Thorlakson](#)

Assessments of Technologies Developed under Future Energy Systems

Principal Investigator: [Amit Kumar](#)

Development and Application of GCAM-Canada Model for Future Energy Scenario Analysis

Principal Investigator: [Evan Davies](#)

Development of a Distributed Energy Management Initiative

Principal Investigator: [Amit Kumar](#)

Integrated Assessment of Environmental Footprints for Energy Scenarios

Principal Investigator: [Amit Kumar](#)

Life Cycle Assessment of Energy System Transitions

Principal Investigator: [Amit Kumar](#)

NSERC/Cenovus/Alberta Innovates Associate Industrial Chair Program in Energy and Environmental Systems Engineering

Principal Investigator: [Amit Kumar](#)

The Future of Energy and What It Means for Labor Markets

Principal Investigator: [Joseph Marchand](#)

RECENT PUBLICATIONS

Local Labor Markets and Natural Resources: A Synthesis of the Literature

Lead Author: [Joseph Marchand](#)

Assessment of energy demand-based greenhouse gas mitigation options for Canada's oil sands

Lead Author: [Anil Kumar Katta](#)

Insights for Canadian electricity generation planning from an integrated assessment model: Should we be more cautious about hydropower cost overruns?

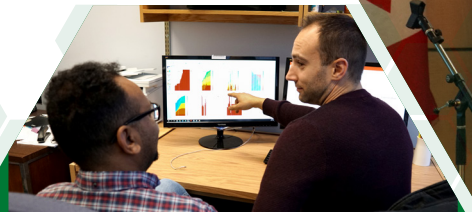
Lead Author: [Evan Arbuckle](#)

RECENT NEWS STORIES

- [Applying the scientific method to labour markets](#)
- [Hitting emissions targets will take more than energy efficiency, says researcher](#)

For the latest information:

futureenergysystems.ca/system-wide



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