# CAMERON WADE

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## WORK EXPERIENCE

**Sutubra Research Inc.** **2020 –**
*Founder and Principal* *Halifax, NS*

- I offer consulting services, decision support tools and techno-economic analysis on issues related to energy systems and deep decarbonization.
- Areas of expertise: electric power systems; integrated energy systems; resource planning and production cost models; mathematical optimization; scientific writing.
- Recent activities: Working with Carnegie Mellon University, the Environmental Defence Fund and Princeton University on a power system model inter-comparison project; Advising groups at the University of Toronto and the University of Calgary on a national open-source energy system model; Performing resource planning optimization for merchant generators and utilities; Leading the development of an open-source energy system optimization model for Atlantic Canada.

**Energy Modelling Hub** **2022 –**
*Committee Member (volunteer role)* *Halifax, NS*

- I serve on the Energy Modelling Hub's platform committee, aiding EMH in strategizing and overseeing potential modelling platforms.

**Institute for Integrated Energy Systems, University of Victoria** **2016 – 2020**
*Research Assistant* *Victoria, BC*

- I was a member of a research group funded by the Pacific Institute for Climate Solutions and tasked with charting techno-economic pathways for the decarbonization of the Western Canadian energy system.
- Focus areas: Power system model development; Application of machine learning techniques to refine the temporal dimension in capacity expansion models; Improving the representation of energy storage technologies in capacity expansion model.

**European Space Agency** **2016**
*Research Intern* *Noordwijk, The Netherlands*

- As a member of the Advanced Concepts Team, I developed computational models for the design and feasibility assessment of using photonic crystals in solar sail attitude control and other deep-space applications.

## EDUCATION

**University of Victoria** *2016 –*
PhD in Mechanical Engineering GPA: 8.8/9.0
***Note:*** Currently on personal leave to run my consulting practice.
*Focus:* Energy Systems Modelling and Analysis
*Supervisors:* Dr. Peter Wild & Dr. Andrew Rowe

***MathMods* Erasmus Mundus Joint Master Degree** *2014 – 2016*
MSc in Applied Physics and Mathematics GPA: 5.0/5.0
MSc in Mathematical Engineering GPA: 107/110
*Consortium*: University of Hamburg, University of L'Aquila, Gdańsk University of Technology

**Acadia University** *2009 – 2013*
BSc in Physics and Mathematics (double major) GPA: 3.9/4.0

## SELECTED AWARDS AND RECOGNITION

*Academic:*

- Pacific Institute for Climate Solutions Fellowship 2016 – 2020
- University of Victoria Fellowship 2016 – 2017
- University of Victoria Graduate Award 2016 – 2017
- Erasmus Mundus Category A Scholarship 2014 – 2016
- Acadia University Scholar 2013
- Acadia Golden 'A' Recipient 2013

*Extracurricular:*

- 3x Canadian Interuniversity Sport (CIS) All-Canadian (Football) 2010 – 2013
- 4x CIS Academic All-Canadian (Football) 2009 – 2013
- 2x Selected to Team World (Football) 2009 – 2011

## SELECTED TALKS AND PRESENTATIONS

- Atlantic Canadian Energy System Modelling Conference (2023; Halifax). Panellist in sessions: *Using energy system modelling to explore the Atlantic Loop; Variable renewables and energy storage in ESMs.*
- C.O.R.E. Conference (2022; Halifax). Panellist in session: *Energy & Climate Modelling for a Resilient Future.*
- Macro-Energy Systems Workshop (2022; Stanford): *Including temperature-dependent efficiencies in energy system planning models.*
- Energy Modelling Initiative (2021; Ottawa): *Exploring the near-optimal solution space of an energy system optimization model using modelling to generate alternatives.*
- Pacific Institute for Mathematical Sciences Workshop on Mathematical Sciences and Clean Energy Applications (2019, Vancouver): *Improving the representation of temporal variability in energy systems models.*
- International Energy Workshop (2019; Paris):*Assessing the location specific grid impacts of prosumage futures.*
- International Energy Workshop (2018; Gothenburg): *A probabilistic method for selecting reduced representative days for long term energy system models.*

## SELECTED PUBLICATIONS

- Sinha, A., Venkatesh, A., Jordan, K., Eshraghi, Wade, C., H., de Queiroz, A., Jaramillo, P., & Johnson, J. (2023). Diverse Decarbonization Pathways Under Near Cost-Optimal Futures. *In review.*
- Fejzić, E., Niet, T., Wade, C., & Usher, W. (2023). Aligning the Western Balkans power sectors with the European Green Deal. *Submitted to Renewable and Sustainable Energy Transition.*
- Palmer-Wilson, K., Donald, J., Robertson, B., Lyseng, B., Keller, V., Fowler, M., Wade, C., Scholtyski, S., Wild, P., & Rowe, A. (2019). Impact of land requirements on electricity system decarbonisation pathways. *Energy policy*, 129, 193-205.
- Keller, V., Lyseng, B., Wade, C., Scholtysik, S., Fowler, M., Donald, J., Palmer-Wilson, K., Robertson, B., Wild, P., & Rowe, A. (2019). Electricity system and emission impact of direct and indirect electrification of heavy-duty transportation. *Energy*, 172, 740-751.
- Keller, V., English, J., Fernandez, J., Wade, C., Fowler, M., Scholtysik, S., Palmer-Wilson, K., Donald, J., Wild, P., Rowe, A, & Crawford, C. (2019). Electrification of road transportation with utility controlled charging: A case study for British Columbia with a 93% renewable electricity target. *Applied Energy*, 253, 113536.
- Wade, B., Pereira, R., & Wade, C. (2019). Investigation of offshore wind farm layouts regarding wake effects and cable topology. In *Journal of Physics: Conference Series* (Vol. 1222, No. 1, p. 012007). IOP Publishing.