Nicole Chan

700 2nd Street SW, Unit 1900, Calgary, AB T2P2W3 nicole.chan@ethree.com

ENERGY AND ENVIRONMENTAL ECONOMICS, INC. Calgary, AB
Senior Consultant

Ms. Chan supports E3's Climate Pathways and Electrification group from E3's Calgary Office. Prior to joining E3, she worked in many aspects of the clean energy transition, including clean energy policy, utility regulatory applications, greenhouse gas accounting and inventories, environmental assessments, and carbon pricing. Nicole has a broad background in the energy sector, having worked for local governments, a district heating utility, research institutions, engineering consulting firms, and oil and gas producers. Nicole has earned a M.Sc. in mechanical engineering from the University of Alberta, and a B.Sc. in chemical engineering from the University of Calgary.

METRO VANCOUVER REGIONAL DISTRICT Vancouver, BC
Energy Roadmap Lead - Climate 2050 (Senior Project Engineer) April 2020 – January 2024

- Led the development of the Climate 2050 Energy Roadmap, which outlines the regional mitigation and adaptation goals and strategies for the Metro Vancouver region
- Led a consortium of seven local governments intervening in the BC Utilities Commission proceeding related to FortisBC's Renewable Gas Rate and 2022 Long-Term Gas Resource Plan, and BC Hydro's 2021 Integrated Resource Plan
- Technical expert for climate mitigation within provincial and federal environmental assessments for major regional projects

CITY OF VANCOUVER Vancouver, BC
Neighbourhood Energy Engineer (District Heating Utility) July 2017 – April 2020

- Managed projects in various stages of design, procurement and construction, with a total value of $10+ million dollars
- Developed a comprehensive excel business case model for a $100+ million dollar expansion of the district heating system
- Provided recommendations for planning of future energy generation plants considering development load forecasting, capital and operating costs, and technical feasibility

CHAN & ASSOCIATES FOR JACOBS CANADA Calgary, AB
Process Engineer-in-Training April 2017 – July 2017

- Assessed the impact of solvent injection on bitumen production and steam requirement relative to the capital and operating costs on performance of steam assisted gravity drainage (SAGD)
- Created a comprehensive indoor consequence analysis model for rupture of a high pressure steam line within a building and calculated life-saving escape times for operators

CENTRE FOR AFFORDABLE WATER AND SANITATION TECHNOLOGY Calgary, AB
Research Intern Sept 2015 – Jan 2017

UNIVERSITY OF ALBERTA Edmonton, AB
Cancer Research Student Winter 2013

SHELL CANADA Calgary, AB
Completions Engineering Intern Summer 2013

MEG ENERGY Calgary, AB
Drilling Engineering Intern Jan – Aug 2012

NATURAL RESOURCES CANADA – CANMET ENERGY Edmonton, AB
Engineering Student Jan – Aug 2012

Education

University of Calgary Calgary, AB
M.Sc., Mechanical Engineering, specialization Environmental 2017

University of Alberta Edmonton, AB
B.Sc., Chemical Engineering 2014

Professional Memberships

Professional Engineer (P.Eng.), APEGA 2024 – Present
Province of Alberta

Professional Engineer (P.Eng.), Engineers and Geoscientists BC 2017 - Present
Province of British Columbia

Papers and Presentations

Chan, N., Young-Rojanschi, C., & Li, S. (2018). Effect of water-to-cement ratio and curing method on strength, shrinkage and slump of the biosand filter concrete body. Water Science and Technology 77 (5). DOI: 10.2166/wst.2018.063

Chan, N., Mitchell, L., Ngai, T., Li, S. (2017). Quality Control in the Decentralized Production of Biosand Filters. Paper presented at the 40th WEDC Conference, Loughborough University, UK.

Chan, N., Mitchell, L., Ngai, T., Li, S. (2016). Quality Control in the Decentralized Production of Biosand Filters. Poster session presented at the Rural Water Supply Network forum, Abidjan, Côte d'Ivoire.

Aliabadi, H.M., Mahdipoor, P., Kucharsky, C., Chan, N., Uludag, H. (2015). Effect of siRNA pre-Exposure on Subsequent Response to siRNA Therapy. Pharmaceutical Research. DOI:10.1007/s11095-015-1741-z.