



## Net Zero Housing

Moderator(s): Ed Freeborn - CBO

DATE: Monday, October 3rd, 2016 TIME: 3:30 pm

LOCATION: Room-210

GUEST SPEAKERS: Mr. Bill Wong - Leidos, Mr. Michael Lio - buildABILITY

DESCRIPTION: Bill Wong - Leidos and Mr. Michael Lio, President buildABILITY, A look into the challenges and strategies for achieving net-zero annual energy consumption. Discussion on building envelope efficiency, air tightness, advanced mechanical equipment, roof top solar, and connection to local utilities, as well as references to NRCan's R-2000 pilot net-zero home program.

BIOGRAPHY: Mr. Bill Wong, Program Manager

Mr. Bill Wong has over 35 years of technical and business experience in the renewable energy and environment sectors. He is currently the program manager of Leidos Canada's Integrated Energy Solutions Program. He has made significant contributions to many renewable energy projects across Canada. Most notably, Mr. Wong was the project manager and lead consultant for the award-winning, first-of-its-kind solar project in North America - the Drake Landing Solar Community - in Okotoks, Alberta. He was the technical consultant to Minto on their net zero energy homes in Minto's Arcadia development in Ottawa. Mr. Wong teaches courses on renewable energy technologies and alternative energy systems at the Algonquin College Bachelor of Building Science program.

Mr. Wong holds a Bachelor's degree in Applied Science and Master's degree in mechanical engineering from the University of Toronto and a Master in Business Administration from the University of Ottawa. In his spare time he coaches soccer and teaches Tai Chi.

BIOGRAPHY: Mr. Michael Lio, President

Michael is a professional engineer who has been involved in sustainable housing for almost 30 years. He has consulted on projects and publications across North America relating to housing, energy efficiency and sustainability. Michael has provided key technical studies that have supported changes to the energy efficiency requirement of every version of the Ontario Building Code since 1990. His studies have supported the development of the Energy Star for New Homes program in Ontario. He has also been retained by Natural Resources Canada to provide the technical rationale for changes to the new EnerGuide Rating System, the new R-2000 Program and the 2012 Energy Star Technical Specification. He has at various times benchmarked the greenhouse gas emissions of new and existing housing in Ontario. He taught sustainable housing in the

Architecture Program at Ryerson University for 12 years while for the last 11 years he has taught building science and building technology and ecology at the Daniels Faculty of Architecture at the University of Toronto in both the undergraduate and graduate architecture programs.