

SUMMARY OF PROFESSIONAL EXPERIENCE

Enerlife's founder and president since 2001, Ian Jarvis is a recognized business leader, and an authority on energy conservation, green buildings and sustainable communities. Since presenting his paper on the first utility data analysis system to the CIB Congress in Stockholm in August 1983, Ian has been at the leading edge of practice and research of high performance buildings for three decades. He is the principal architect of Enerlife's building performance diagnostic, management and reporting methodology, tools and online system. Ian provides strategic and technical advice to Enerlife's projects and clients, and brings unique knowledge and experience of achieving and sustaining exceptional performance in individual buildings and portfolios. He is an expert witness in regulatory hearings, and advises governments and utility companies on policy and program design and evaluation. Ian is an accomplished speaker and workshop leader, and has authored many articles and reports on energy efficiency in buildings.

Ian co-chairs the working group for CivicAction's Race to Reduce, a large-scale, collaborative program among landlords and tenants which is substantially improving the energy and environmental performance of office buildings. He is also an adjudicator of the NAIOP REX Green Award for commercial buildings.

From 1992 to 1999 Ian was CEO of a leading energy performance contractor responsible for many of the largest energy retrofit projects in North America. Ian served as chair of the Canada Green Building Council from 2003-2007, and as a director of Milton Hydro, one of the most progressive local electric distribution utilities in Ontario, from 2000-2007. In 2013, Ian was an expert witness at the Ontario Energy Board's hearing on Enbridge's Greater Toronto Area pipeline.

Ian represented the energy efficiency industry on the 1998 Team Canada trade mission to South America, and was the Canadian Government's invited private sector representative at the 1999 Hemispheric Energy Ministers' Conference in New Orleans. In 2001 he was a member of Premier Hamm's expert panel advising the Nova Scotia Government on energy policy alternatives.

HIGHLIGHTS OF EXPERIENCE

- Over 30 years' experience at the leading edge of energy performance in buildings
- Founding partner and CEO of Rose Technology Group during growth across Canada and the United States
- Principal architect of performance-based conservation as a new, evidence-based methodology for buildings

AREAS OF SPECIALIZATION

- Vision and strategy development
- Authority on evidence-based energy conservation in buildings
- Portfolio and sectoral program design
- Authorship of thought leadership articles & reports
- Leadership of multi-disciplinary workshops and project teams
- Keynote addresses and technical speaking engagements

PROFESSIONAL AFFILIATIONS

- Founding Chair, Canada Green Building Council (2003 – 2007)
- Member, National Advisory Council on Energy Efficiency (1999 to present)
- Member, Ontario Energy Minister's Advisory Committee (2006 – 2011)
- Professional Engineers Ontario

ACADEMIC QUALIFICATIONS

- Bachelor of Science (Honours), Mechanical Engineering, Imperial College of Science and Technology, University of London

RELEVANT PROJECTS AND PROGRAMS

Cadillac Fairview Corporation

Team leader in guiding a succession of major commercial office buildings to mid-90s Energy Star scores.

Public Sector Energy Conservation and Demand Management Plans

Development of concise, consistent, evidence-based plans for achieving top-quartile energy performance in 11 individual hospitals, a 105 schools portfolio, and a city with 550 buildings.

Simcoe County District School Board

Master planning, development and deployment of a comprehensive, implementation project to achieve targeted energy performance standards in high-potential schools, resulting in energy savings of over \$3.5 million. A subsequent phase of this program, also managed by Enerlife, is currently underway.

Living City Programs (for Toronto and Region Conservation Authority)

Concept design, development and ongoing executive oversight of large-scale energy conservation programs with Toronto and Region Conservation Authority, including:

- Greening Health Care (since 2004, ongoing)
- Mayors' Megawatt Challenge (since 2003, ongoing)
- Sustainable Schools (since 2005)

20 by '15 Commercial Office Building Target (for Real Property Association of Canada)

Development of Real Property Association of Canada's 20 by '15 energy performance target and white paper for commercial office buildings and the related methodology and reporting template for their national benchmarking program.

Oxford Properties

Technical content for development of their Sustainable Intelligence Operations Guide for Office Buildings, a practical tool for enhancing the environmental performance of Oxford's buildings.

GREEN UP Pilot Projects and Programs (for Canada Green Building Council), 2007-2012

Concept design, development and executive oversight of national GREEN UP pilot projects and program development for the Canada Green Building Council (CaGBC). The pilot projects informed and tested the introduction of LEED Existing Buildings: O+M in Canada, and established GREEN UP across Canada as the CaGBC's performance-based complement to LEED Canada. The large-scale projects included commercial offices, K-12 schools, government administration buildings, retail bank branches and municipal arena facilities, with more than five hundred buildings.

PUBLICATIONS AND RESEARCH

- **"Getting to 20: Achieving 20 ekWh/sf/year in Town/City Halls by 2015"** White paper for Toronto and Region Conservation Authority, 2013
- **"Where the Green Jobs Are: Harnessing the Energy Conservation Potential in Buildings"** White paper, 2011
- **"20 by '15: Achieving the Office Building Target of 20 ekWh/ft2/year by 2015"** White paper for the Real Property Association of Canada, 2009
- **"Closing the loops: How real building performance data drive continual improvement"** Article for Intelligent Buildings International journal, 2009
- **"A Deeper Shade of Green"** Article for ReNew Canada: The Infrastructure Renewal Magazine, 2007
- **"Realizing the Electricity Conservation potential in Ontario's Private Rental Housing Sector"** Study for the Ontario Power Authority, 2006
- National study for Natural Resources Canada into actual versus modeled energy performance of buildings designed under the federal CBIP program, 2004
- **"Making Ontario the Leader in Energy Efficiency"** (Co-author) A study for the Ontario Ministry of Energy, which became the foundation document for Ontario's Green Energy Act, 2003
- **"Sustainable Peterborough"** A guide to sustainable communities sponsored by the Government of Canada, 2002
- **"The SUMAC System: Relentless Progress Towards Optimum Energy Use in Buildings"** Presentation to the CIB Congress in Stockholm, Sweden, 1983