

UWO IEEE Student Branch
IEEE London Section Power & Energy Society (PES) Chapter

SUSTAINABILITY AND THE SEMINAR SERIES
Hydrogen Village—Developing Alternative Fuel Infrastructure

Date: Tuesday, Feb 23rd 2010
Time: 7:00 p.m. - 9:00 p.m.
Location: The University of Western Ontario, Lambton Rd at Western RD, London
<http://www.geography.uwo.ca/campusmaps/>
Room: SEB 3109 (Spencer Engineering Building)
Cost: **Free — Open to Everyone**

Introduction

Maike Luiken, Ph.D., Dean, Sustainability,
Business Development & Applied Research, Lambton College
Chair, IEEE London Section

WEBots Robotics Competition Award

Keynote

Hydrogen Village - Developing Alternative Fuel Infrastructure

Keynote Speaker

Rymal Smith P.Eng. Director, Hydrogen Village Program
Program and President of Change Energy Inc.

Q & A — General Discussion



RSVP with Meranda Salem

Beverages will be provided

www.eng.uwo.ca/ieee
www.hydrogenvillage.ca
london.ieee.ca

SUSTAINABILITY AND THE SEMINAR SERIES

Hydrogen Village—Developing Alternative Fuel Infrastructure

Abstract

The proposed talk will outline the purpose, history, ongoing activities, and lessons learned from the Hydrogen Village Program. Hydrogen Village was initiated in late 2004 with its primary purpose being to accelerate the development of early commercial markets for hydrogen and fuel cell technologies in the Greater Toronto Area. The term "Hydrogen Village" is used in recognition of the fact that many early uses for these technologies will be community based - both stationary and mobile - where people work and live. There are three primary activities of the Hydrogen Village:

- Early deployments; we have assisted with the deployment of several dozen hydrogen and fuel cell applications throughout the city including transportation, material handling, backup power, and grid power.
- Business development; we have assisted with business planning and development, customer awareness and education, solutions development, and regulatory issues
- Outreach and education; we have developed and delivered outreach programs to various levels of government, business, academia, and community groups.

The talk will provide an overview of these activities and touch on some of the many lessons that have been learned. It is hoped that by sharing this market development approach and experience with other alternative fuels and in diverse regions, we will develop worldwide markets for these emerging technologies and the new businesses being built around them.

Bio

Mr. Smith has an extensive background in the development and implementation of alternative transportation energy systems. He is currently President of Change Energy; a company that embraces a broad range of fuel and technology solutions for alternative transportation energy. Change will:

- Analyses and Assesses the most appropriate alternative energy solution for a given operation,
- Designs and Deploy refueling infrastructure,
- Operate and provide Ownership options for Alternative Fuel infrastructure.

Ry is also currently the director of the Hydrogen Village Program; an internationally recognized program developing commercially sustainable markets for hydrogen and fuel cell technologies and infrastructure in the Greater Toronto Area. Previous positions held by Mr Smith include, Manager of the Natural Gas Vehicle (NGV) Division with Union Gas, and Director of Transportation Business Development with Stuart Energy.

His background in these industries includes:

Hydrogen and NGV market analysis and development

Development of a wide range of high pressure gaseous vehicle fuelling station solutions, ranging from small fleets to public retail stations to large bus fleets

Management of a network of private and retail NGV refueling stations supporting 8,000 vehicles

Hydrogen and NGV station design, engineering and project management (Project Manager for some 30 NGV and H2 vehicle refueling facilities)

Project design and management of hydrogen energy stations including on-site hydrogen production and power generation

Active participation in the development of Codes, Standards and Regulations for the Hydrogen and Natural Gas Vehicles (NGV) industries

Infrastructure and station system modeling, analysis, and optimization.

Mr. Smith is the recipient of the Natural Resources Canada's Michael Grant Technology Award and the CNGVA Award of Merit.