

JOBS, INFRASTRUCTURE & CLIMATE LEADERSHIP

Preliminary Program OCT. 17 - 19 CALGARY

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what's it all about

Communities are at the heart of our economic, infrastructure, and climate challenges. By advancing Smart Energy Communities we can turn these challenges into a once-in-ageneration opportunity.

Join up to 350 national and international leaders from governments, utilities and energy service providers, the real-estate sector, the product and professional service sector, among others for QUEST's 10th Anniversary **Conference & Tradeshow** – where plans are hatched, partnerships are built, and projects are accelerated.

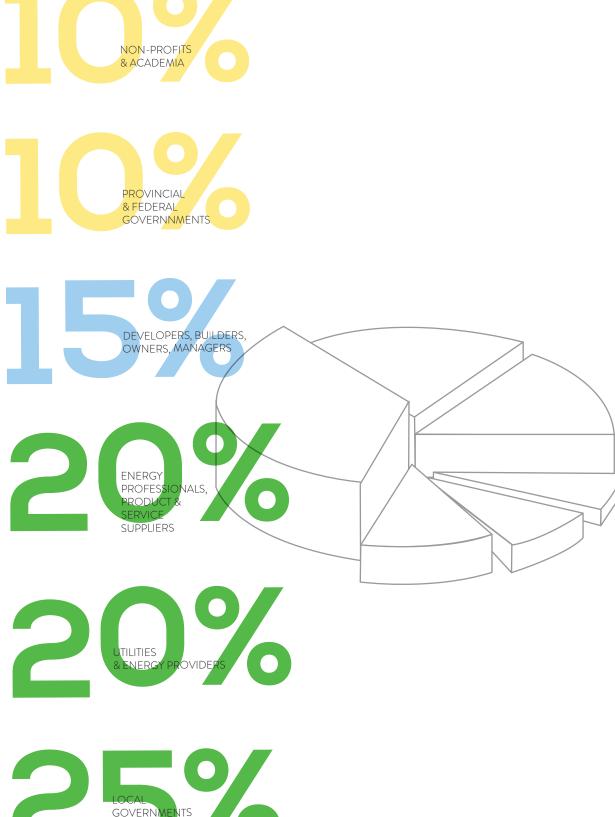
How can we better produce, move, and use energy at the community level to create jobs, strengthen our communities, and reduce greenhouse gas emissions?

Register now for QUEST2016 and put your organization at the centre of three days of workshops, study tours,

 project showcases, networking, and national and international dialogues to advance Smart Energy Communities in Canada.

<u>key</u> focus areas:

- Maximizing Energy Efficiency for Local Job Creation
- Growing Clean Energy Markets with Green Banking and Carbon Pricing
- Making a Case for Combined Heat & Power
- Integrating Infrastructure for Electric & Alternative Fuel Vehicles
- Harnessing Local Energy Sources for Renewable Natural Gas
- Community Energy Planning: Getting to Implementation
- Building Smart Energy Communities - Advice for Small, Rural, Remote and First Nations

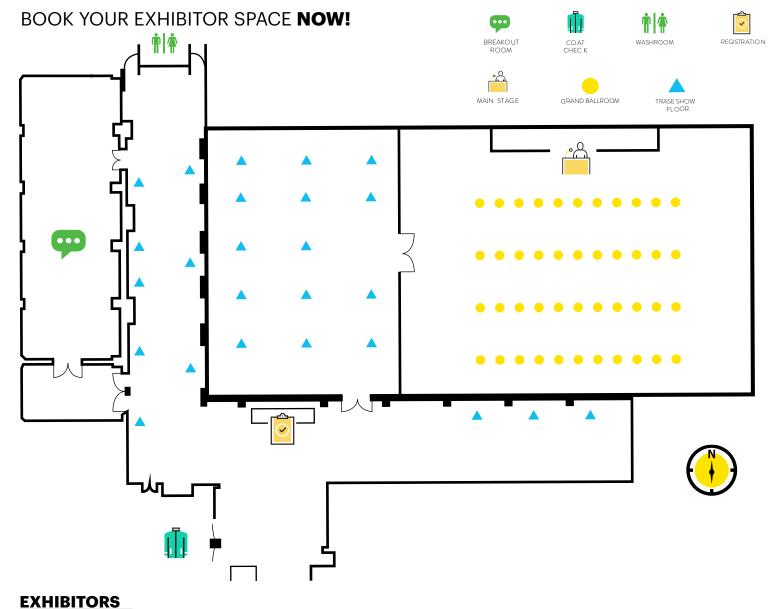


who will be <u>there</u>

Accommodations

Book your accomodations at QUEST2016 preferred venue: The Westin Calgary.

QUEST 2016 Westin Hotel Bookings





























Join us for QUEST's 10th **Anniversary Smart Energy Communities Awards & Gala** Dinner. The Gala is an opportunity to bring together our networks from across **Canada to celebrate Smart Energy Communities in Canada.**



Utility and Energy Service Providers



Real Estate Sector

Includes owners, operators and builders.





Local Public

Service Sector

Includes minipalities (and their agencies, boards & commissions), universities, schools and hospitals.

2016 FINALISTS

Local Public Service Sector

The City of North Vancouver, BC for the Moodyville showcase community.

The City of Richmond, BC for its Alexandra District Energy Utility -Clean, efficient energy for now and the future.

The City of Saint John, NB for its Municipal Energy Efficiency Program - A Collaborative Municipal Approach to Environmental Sustainability and Fiscal Accountability.

Utility & Energy Service Providers

Enbridge Gas Distribution's Savings by Design Program - created to assist builders design and construct buildings and houses with higher energy performance.

Kambo Green Solutions for its energy efficiency project for the remote First Nation community of Wuikinuxv.

Solar Global Solutions for its turnkey Net Zero Energy system as part of the construction of the new Pictou Landing First Nation Band office

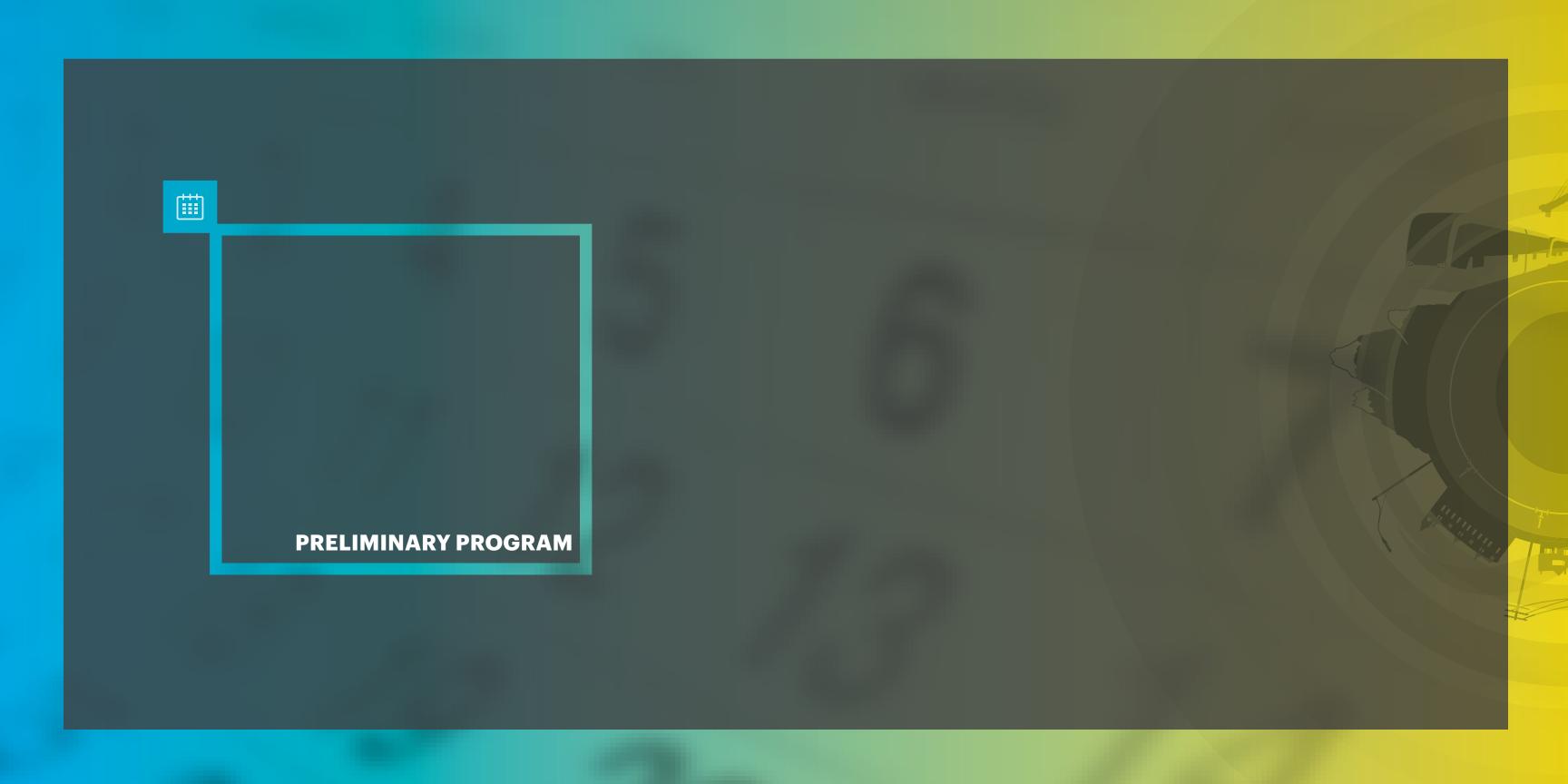
Real Estate Sector

Ameresco and the City of London, ON for the comprehensive improvement project to enhance energy efficiency at the Canada Games Aquatic Centre.

Housing Nova Scotia for its affordable Housing Duplex with Passive House Standards.

Landmark Group of Companies for Bearspaw Crossing, a smart

energy community that makes sustainable living easier to achieve for first time home owners.



A: Maximizing Energy Efficiency for Local Job Creation

Energy efficiency is widely recognized as the most cost-effective way to reduce GHGs. From street lights to building automation to systems integration, this session will explore how Smart Energy Communities take advantage of the full potential of energy efficiency resulting in lower energy costs and emissions, improved operating performance and job creation opportunities.

Bryan Purcell, Director of Policy & Programs, Toronto Atmospheric Fund (moderator) Jesse Row, Executive Director, Alberta Energy Efficiency

Marco Lacampo. Program Manager. City of Toronto Mark Hutchinson. Vice President. Green Building Programs

B: Making a Case for Combined Heat & Power

With infrastructure and carbon pricing at the top of the national energy conversation. CHP improves community competitiveness and offers a pathway to improve efficiency, enable local energy opportunities and increase resilience. Whether you are considering investing in or currently implementing CHP, join leading experts as we explore the latest in CHP technology, economics. and how to mitigate the impact of carbon pricing policy.

Raymond McKay, VP, Energy Solutions, ENMAX Jan Buijk, President, EPS AB Energy Canada Mike Roppelt, President, GSS Gordon Kaiser, FCIArb (invited)

C: Growing Clean Energy Markets with Green Banking and Carbon Pricing

Green bank financing and carbon pricing are being used to spark consumer demand and lower the costs of clean energy. Join leading experts to better understand how green bank financing and carbon pricing is accelerating clean energy market growth while making energy cheaper and cleaner for consumers, driving job creation, and preserving taxpayer dollars.

Caroline Saunders, British Consul General in Calgary (moderator) **Lorraine Becker.** President. Canadian Coalition for Green Finance

Paul Vickers, Partners, Climate Solutions Group **Dr. Andy Gouldson**, Deputy Director, Centre for Climate Change Economics & Policy

12:30-1:45 Lunch Keynotes

In conversation with Hon. Sergio Marchi, President and CEO, Canadian Electricity Association

Update on FCM Programming Climate Change & Asset Management **Devin Causley**, Manager Climate Change Programs, FCM



Resilient Infrastructure, Resilient **Communities**

2:00-3:00 Speakers Panel

Karen Farbridge, former Mayor of the City of Guelph and QUEST Ontario Caucus Chair (moderator)

Gaetan Thomas, NB Power, President Christian Provenzano. Mayor. City of Sault Ste. Marie

Andre Rochette, Founding President & CEO, Ecosystem

How can communities and utilities overcome enormous infrastructure replacement costs with increased pressures on constrained budgets, rising energy costs, and climate change targets? How should a community or utility prioritize infrastructure investments? This plenary session will profile how communities of all sizes are turning to Smart Energy Communities as a means to respond to today's uncertainties and capitalize on their advantages to maintain a high quality of life and vibrant local economy.

3:00-3:30 Networking break on the **Smart Energy Communities Tradeshow Floor**

3:30-4:45 Accelerator Session

Participants select one of three accelerator sessions led by industry experts.

A: Integrating Infrastructure for **Electric & Alternative Fuel Vehicles**

Electric and alternative fuel vehicles will fundamentally change how utilities do business and potentially strain their existing distribution infrastructure. Those communities and utilities that are proactive and develop an integrated solution will be in the best position to take advantage of the opportunities that alternative transportation presents, while minimizing the potential risks.

Mo Bot, Senior Engineer, City of Edmonton Bruce Winchester, Executive Director, Canadian Natural Gas Vehicle Alliance Yves Hennekens, Président, YHC Environnement

B: Harnessing Local Energy Sources for Renewable Natural Gas

As governments – both provincial and federal - discuss lower GHG emissions pathways. renewable natural gas (RNG or biomethane) from local sources offers an underutilized opportunity for GHG emission-free energy in communities across Canada. This session will explore the basics of RNG, the marketplace for RNG across Canada and the current applications of RNG.

Aditya Iyer, Senior Advisor, Innovation and New Markets, Canadian Gas Association Jason Wolfe, Director, Energy solutions, Fortis BC

C: Driving Forward Resilience in the **Energy Distribution Sector**

Energy delivery systems (electricity, natural gas, thermal energy, storage) are being fundamentally changed through the emergence of new technologies, more affordable energy options, evolving customer expectations, changing weather patterns, environmental demands, and the increasing demand for supply reliability and system resilience. Join leading experts as they explore the solutions provided by district energy. Smart Energy Networks and distributed energy systems.

Sean Casey, Project Engineer, FVB Energy Lena Ahmadi, Postdoctoral Research Fellow University of Waterloo & Smart Energy Task

John Rathbone, Senior Consultant, Ramboll

U*E<u>VENING</u>

6:30-10:00

Annual Gala & Awards

Celebrating 10 Years of Advancing Smart Energy Communities

Michael Harcourt, Chair of QUEST, in conversation with a special guest (stay tuned)





Phil Fontaine Former National Chief of the Assembly of First Nations



Honourable **Shannon Phillips** Minister of Environment & Parks, Government & Alberta (invited)



Christian Provenzano Mayor, City of Sault Ste. Marie

OCTOBER

MONDAY

:Ö:

DAY ONE

Welcome to QUEST2016

Sir David Anthony King, UK Special Representative **Councillor Brian Pincott** Ward 11 Karen Farbridge, former Mayor of the City of Guelph

Smart Energy Communities

Create Jobs & Grow the

9:00-10:15

8:30-9:00

Speakers Panel

Economy

Vicky Sharpe, Director, The Capital Markets Regulatory Authority, and member QUEST Board of Directors (moderator) **Dr. Andy Gouldson,** Deputy Director, Centre for Climate Change Economics & Policy Colleen Giroux-Schmidt, Senior Director, Governmental and Regulatory Affairs, Innergex Chris Bloomer, President & CEO, Canadian Energy Pipeline Association

How can businesses and communities leverage their climate and energy plans to promote innovation, job creation and economic development? How might innovation in energy delivery and clean energy technologies support local economies and aid industry and businesses to remain competitive? A plenary session dedicated to the competitive advantage of Smart Energy Communities and how technology, alternative energy systems and fuels can create jobs and benefit your bottom line.

Networking break on the **Smart Energy** 10:15-10:45 **Communities Tradeshow Floor**

8:30-9:15

Opening Keynote **Phil Fontaine,** Former National Chief of
the Assembly of First Nations

9:15-10:15

The Role of Utilities

In Conversation with Gianna Manes, Presdient & CEO, ENMAX Corporation

10:15-10:45

Networking break on the **Smart Energy Communities Tradeshow Floor**

10:45-12:00

Accelerator Session

A: Community Energy Planning: Getting to Implementation

Sarah Marchionda, Manager, Research & Strategic Initiatives, QUEST **Dick Ebersohn**, Program Manager, Climate Change, City of Calgary, Alberta

David Roewade, Sustainability Planner, Region of Waterloo, Ontario (invited) **Chris Osborne**, Senior Planner, Campbell River, BC

Community Energy Planning: Getting to Implementation in Canada (GTI) is a national initiative helping over 200 communities, representing 50 percent of the population, to implement Community Energy Plans (CEPs). Be one of the first to see the Community Energy Implementation Framework, a guide that helps local governments, elected officials, utilities, the real estate sector, and others, create the conditions for successful CEP implementation. In this session, delegates will hear from the Community Energy Planning: Getting to Implementation in Canada pilot communities - the Region of Waterloo, Calgary and Campbell River about what it takes to implement CEPs.

B: High Performance Buildings & Standards

Betsy Agar, Research Manager, Renewable Cities

John Goddan, Principal, Clearsphere Morgan McDonald, Ledcor Renew Mattew Wood-Hill, Cities Standards Coordinator, Future Cities Catapult

Deep retrofits, renewables, fuel switching, and recommisioning. This session will look at how buildings can help meet Canada's climate change targets. Panelists will explore key recommendations to get us there.



Smart Energy for Small, Rural, Remote and First Nations

Lunch Keynotes

The Low Carbon Partnership at Work

Chad Park, Chief Innovation Officer, The Natural Step

Elizabeth Sheenan, Climate Smart BC

A UK Model for Promoting Healthy Cities

Mattew Wood-Hill, Cities Standards Coordinator, Future Cities Catapult

1:30-2:00 **Speakers Panel**

Gordon Van Tighem, Chair, QUEST North Caucus (invited)

Melanie Bayley, VP of Innovation & Engineering, ATCO Larry Sault, former Chief of the Mississaugas of New Credit First Nation

Rebecca Sullivan, GM Stakeholder & Aboriginal Relations, Suncor Energy

The session will focus on Smart Energy Communities through the lenses of risk mitigation, smart energy options for small, rural, remote and First Nations communities, and harnessing technology to minimize the impact of extreme weather events. Join community and industry leaders for knowledge sharing and capitalizing on an opportunity with the goal of supporting Fort McMurray to become Canada's model for Smart Energy Communities.

3:00-3:45

Interactive Small Roundtable Discussion with Industry Experts

Join experts at small tables to get advice, learn about the latest solutions and tackle barriers limiting breakthroughs for your community or business.

Topics to be addressed include:

- Clean energy options for transportation, heating and power
- Connecting local economic development to energy
- Taking action in small communities
- Community energy planning and engagement,

3:45-5:00

Alberta's Green Energy Doors Open Kickoff
Reception on the **Smart Energy Communities Tradeshow Floor**



Speakers Corner



Sergio Marchi
Canadian Electricity
Association, President & CEO



Melanie Bayley
ATCO, VP, Innovation
& Engineering



Gaëtan Thomas NB Power, President & CEO



<u>Chris Bloomer</u> Canadian Energy Pipeline Association, President & CEO



QUEST2016 and Decentralised Energy Canada (DEC) have partnered to bring you Alberta's Green Energy Doors Open (GEDO). On October 19th, we invite you to experience Calgary's backyard as you visit the energy projects and neighbourhoods that are defining Smart Energy Communities. Last year, over 150 organizations opened their doors to more than 5,000 attendees in Alberta and Ontario.

Tour #1

9:00 - 10:30 **ENMAX District Energy Centre**

Commissioned in 2010, the ENMAX District Energy Centre is the largest privately owned facility of its kind in Alberta. It houses four large boilers which produce 55 MW of thermal heating capacity.

The District Energy Centre and can heat nearly 8 million square feet of commercial, residential, and institutional space in Downtown Calgary and the East Village.



11:00 - 12:00 **University of Calgary - CHP**

In 2011, the University of Calgary worked with Stantec Consulting to convert its central heating and cooling plant into a cogeneration facility that cuts CO2 emissions by 80,000 tonnes annually, far below both national and global standards. This facility takes the natural gas normally used to produce heat and instead uses it to run a gas turbine that generates electricity for the campus. The waste heat produced by the turbine is used to and advanced analytical tools to heat all of the buildings on the main campus. By using this waste heat, a total energy efficiency of 75 percent can be achieved.



12:30 - 1:30 **GE Innovation Centre**

The GE Customer Innovation Centre (CIC) brings together global experts explore, analyze and solve business challenges. The tour will kick off by showcasing the Centre and how it is incubating new technologies from start-ups working hand in hand with industry professionals and higher education partners. In addition, you will see leading edge solutions to help communities across Canada improve their energy efficiency and move towards cutting edge smart community solutions. Along the way GE will show how they are de-risking capital projects, extracting energy from waste, keep communities safe from pipeline leaks, creating renewable power solutions, and lowering the cost of lighting in communities



Seton - Calgary's South Urban **District, by Brookfield Residential**

One of the most comprehensive mixed-use developments in North America. Seton's plan includes over two-and-a-half-million sq.ft. of office and retail space, a 16-acre Seton Central Park, public library, schools, 1,300 multi-family residences, an active main street, Calgary's new South Health Campus as well as the City announced regional recreation centre - all serviced by the future southeast LRT.

11:00 - 12:00 **ATCO CHP Facility Okotoks**

The 14,000 square foot building services nearly 24,000 customers across Okotoks and the foothills, all while boasting state of the art efficiency through a small-scale combined heat and power technology. The building features a number of energy efficient systems like low-voltage lighting that dims automatically on brighter days and block heaters that operate at cold temperatures and cycle on and off every 20 minutes. The construction of the new facility also creates more history between Okotoks and ATCO, which have been in a partnership since 1912.

ALWAYS THERE, ANYWHERE,



12:30 - 1:30 **Drake Landing Solar Community**

Drake Landing Solar Community is Canada's largest subdivision of energy-efficient and environmentally-responsible homes, and the continent's first major implementation of seasonal solar thermal energy storage. This technology overcomes a longstanding obstacle facing the widespread use of solar heating: the cold, dark winter season. The community's innovative design allows solar energy absorbed in the summer months to be stored underground and returned to the homes as heat in the winter. The community consists of 52 single-family homes.



9:00-1:00 **Energy Futures Lab: The Newtonian Shift**

Energy Futures Lab: The Newtonian Shift is a dynamic workshop experience designed to glean insights about the emerging energy

Come experience the energy transition in action!





QUEST

Quality Urban Energy Systems of Tomorrow

IN CANADA

QUEST is a leader in the advancement of Smart Energy Communities. Smart Energy Communities improve energy efficiency, enhance reliability, cut costs, and reduce greenhouse gas emissions.

By conducting research, engagement and advocacy, QUEST supports governments, utilities & energy service providers, the real-estate sector, the product and professional services, among others, to grow and service the Smart Energy Communities marketplace.

With a national network of 8 provincial and regional Caucuses and a reach of 10,000+ stakeholders, QUEST is making Smart Energy Communities a reality.

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Gordon Van Tighem

& Adam Chamberlain

Co-Chairs, QUEST North

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