

# **PROGRAM**

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9.00	Welc	nme

- **9:15** Integrating Land-Use and Community Emissions Planning
- **10:15** Energy Break Coffee Served
- **10:30** New Energy Provisions in the BC Building Code
- **11:10** Going Beyond Building Code: Future Policy Innovations
- **12:00** Engaging the Community in Community Energy
- **12:30** Power Lunch Food Provided
- **1:15** QUEST Roundtable: Community Energy Systems: Fostering a Dialogue Between Developers and Local Governments
- **4:00** Reception Sponsored by PICS





# MORNING

Welcome 9:00 - 9:15 Anvil Centre Welcome **Stephen Sheppard** General Welcome **Rory Tooke** The Community Energy Explorer CALP 9:15 - 10:15 **Integrating Land-Use and Community Energy Planning** Facilitator Eric Aderneck Metro Vancouver The Regional Scale: A Context for Community Energy Planning Elisa Campbell Metro Vancouver Enabling Community Energy Systems through Regional Policy **Jeff Carmichael** Metro Vancouver **Overcoming barriers and realizing opportunities Emilie Adin** City of North Vancouver Putting the Planners into Community Energy Planning Julie Dowry City of Vancouver Our City 2041: Setting the Stage for Community Energy Planning in Our New OCP **Jackie Teed** City of New Westminster Neighbourhood-scale district energy opportunities in New Westminster Norm Connolly City of New Westminster Question and Answer 10:15 - 10:30 Energy Break - Coffee Served **Building Code and Policy Innovations** 10:30 - 12:00 Facilitator Dave Ramslie Integral Group New energy provisions in the BC building code New Energy Provisions in the BC Building Code **Innes Hood** Homeowner Protection Office What Do Building Code Changes Mean for Regulators and Builders? Tim Ryce City of North Vancouver Question and Answer Going beyond building code: future policy innovations

SPEAKER

PANEL

Benchmarking: Driver for Retrofits of Existing Buildings

Home Energy Labelling and Building Energy Benchmarking

Question and Answer

BC Hydro Programs to Support Local Innovation in Building Energy Efficiency

Katherine King BC Hydro Andrew Pape-Salmon

> **Ellen Pond** Pembina Institute

# AFTERNOON

INTERACTIVE

PANEL

# **Engaging the Community in Community Energy**

12:00 - 12:30

Social Mobilization Around Local Energy and Emissions

**Stephen Sheppard** CALP

Interactive Tools for Community Energy Engagement

**Rory Tooke** CALP

Power Lunch - Food Provided

12:30 - 1:15

# Community Energy Systems: Fostering a Dialogue between Developers and Local Governments



Systems of Tomorrow









### **Community energy systems**

Advancing Smart Energy Communities in Canada

Community Energy Systems 101

**Brent Gilmour QUEST** 

**Trent Berry** Reshape Strategies

**Facilitator** Frank Carnevale SustainCo Inc.

**Owner and Operator Update** 

Owner and operators of Community Energy Systems reflect on their experience

Jeff Fisher

Greg Mitchell

Question and Answer

PCI Group

### Developer and real estate sector update

Real estate stakeholders report on how energy is being considered in their business practices and on the developer experience with Community Energy Systems.

**Chris Baber** 

City of Vancouver

Jason Owen City of Surrey

**Ben Themens** 

City of North Vancouver

**Robin Petri** Wesgroup

Question and Answer

#### **Roundtable Discussion:**

How can stakeholders collaborate to improve the municipal experience, the developer experience, and the user experience around community energy systems?

**Reception** - Sponsored by the Pacific Institute for Climate Solutions

4:00 - 5:30



### Eric Aderneck, Metro Vancouver



Eric Aderneck is a Senior Regional Planner with Metro Vancouver regional government, and has been directly involved with the development and implementation of the Regional Growth Strategy as well other region-wide initiatives. Prior to this, he worked as a planning consultant, managing land development projects through the design and approval process. He is a Registered Professional Planner with over a decade's worth of experience in the region in both the public and private sectors. His formal education includes a Master's Degree in Urban and Regional Planning from Queen's University, a Bachelor's Degree in Commerce from the University of Victoria, and a Diploma in Urban Land Economics from the University of British Columbia.

Elisa Campbell, Metro Vancouver



Elisa Campbell has a professional background in urban planning, sustainable buildings/community design, and resource management. She has worked for many years at the forefront of implementing solutions for resilient, prosperous, and livable built and natural environments in the context of global urbanization and a warming planet. Her expertise and work in environmental planning, urban design, green buildings, and low carbon communities has earned recognition from the Canadian Institute of Planners, the American Society of Landscape Architects, the Canadian Home Builders Society, and others.

Elisa is Director of Regional and Strategic Planning at Metro Vancouver, the regional government that delivers service excellence in the areas of regional growth planning, water and solid waste management, regional parks, affordable housing, and community engagement to over 2.3 million residents in the greater Vancouver area.

Jeff Carmichael, Metro Vancouver



Jeff Carmichael has a Ph.D. in environmental economics from the University of Colorado at Boulder. He manages the Utility Research and Innovation Group at Metro Vancouver, where he has worked for 7 years, focusing mainly on energy, climate change, and sustainability issues. Prior to that he spent several years as a Research Associate at the Sustainable Development Research Institute at UBC, working on these issues as well as water management concerns in the Okanagan.













Emilie Adin, City of North Vancouver



Emilie K. Adin, RPP, LEED® AP, is the City of North Vancouver's Deputy Director of the Community Development Department, managing the long-term, community and development planning functions for the City. Emilie has written widely on urban design and planning, including the PlanGirl Travels column in Planning West magazine, and she is currently writing a book on the history of urban design ideas in Europe. She holds a UBC Master's Degree in planning and an SFU Urban Design Certificate; and has instructed at Royal Roads University.

Julie Dowry, City of Vancouver



Julie Lowry, MRM (PI), is the Sustainability Specialist at the City of North Vancouver responsible for climate action and waste reduction policies and programs. Julie seeks to continually consider environmental, social, and economic priorities in her planning work. From SFU, Julie holds a Master's Degree in planning and resource management and a certificate in Sustainable Community Development.

Jackie Teed, City of New Westminster



Jacki Teed, to be filled out















#### Norm Connolly, City of New Westminster



Norm Connolly is an urban planning professional and project manager with 12 years' experience in federal, municipal and non-profit sectors.

He currently works for the City of New Westminster as the city's Community Energy Manager supporting the implementation of New Westminster's first district heating system, and spearheading community-wide energy efficiency programs for new and existing buildings.

Previously, he served as Executive Director with the Community Energy Association, leading an enterprising non-profit organization at the forefront of assisting local governments in British Columbia to reduce their greenhouse gas emissions.

Dave Ramslie, Integral Group



Dave is an expert on planning, policy and urban design issues as they relate to sustainable urban development. A planner and urban designer by training, Dave has over a decade of experience in research, design, policy, regulation, and incentive program development. A true practitioner and implementer, Dave has an unparralled track record of developing comprehensive strategies and turning them into actions that yield results. These efforts have been recognized with multiple awards from The World Green Building Council, the World Wild Life Fund, the Canadian Green Building Council, the Canadian Institute of Planners, and the International Living Future Institute.

Innes Hood, Homeowner Protection Office



Innes is a professional engineer with twenty years of experience in energy efficiency and sustainability. Innes' work includes technical, financial and policy analysis of energy. Innes is currently finalising an Illustrated Guide for new energy efficiency requirements in the Province of BC. He recently completed an analysis for the Province of BC to estimate the impacts of new energy code requirements for commercial and institutional buildings. Innes provides consulting services through Stantec Consulting and through his













Tim Ryce, City of North Vancouver



Tim is the Assistant Manager of Permits & Inspections at the City of North Vancouver. He holds a Masters in Engineering for Sustainable Development and a Bachelors of Applied Science in Mechanical Engineering. Until recently, Tim was a Building Policy Engineer at the City of Vancouver, where he developed Building Code requirements for the City's Green Homes Program, electric vehicle charging infrastructure mandate, and Adaptable Housing requirements. Tim was lead regulatory Peer Reviewer for the Technical Guide for the Design and Construction of Tall Wood Buildings, released in April 2014, and is a member of the BOABC Section 9.36 Code Change Seminar Steering Committee.

Katherine King, BC Hydro



Katherine King is the Policy Specialist in the BC Hydro's Advanced DSM Strategies group. She is managing the development of several long term strategies to lay out the roadmap for super-efficient new and existing buildings, products and equipment regulations. Her current focus is on facilitating widespread adoption of building benchmarking and reporting practices.

Katherine has more than ten years of research, policy development and planning experience. Katherine has conducted extensive research in on leading local government policies. She designed innovative policy analysis framework, tools and resources to help communities achieve their energy and GHG reduction goals. With her advice, several urban and rural communities have designed, adopted and implemented groundbreaking and effective energy efficiency policies.

Andrew Pape-Salmon, RDH



Andrew is a professional engineer and senior energy specialist with RDH Building Engineering Ltd. He is an experienced leader in the implementation of energy efficient technologies, designs, and management practices for buildings, equipment and communities. He has 19 years of experience in the field of sustainable energy. At RDH, he is responsible for energy sector services that are provided to a broad range of client groups and building industry partners, including energy policy consulting (strategies, legislation, codes and standards, institutional frameworks), community energy planning and demand-side management program design and evaluation, among other areas.













Ellen Pond, Pembina Institute



As director of Pembina's Buildings and Urban Solutions program, Ellen leads a team focused on the development of climate change and clean energy solutions for the built environment. The Buildings and Urban Solutions program employs a strategic, multipronged approach, combining market transformation strategies with local capacity building and new policy development, working through partnerships with leading local governments and engagement with the provincial government and key stakeholders. One key initiative is Green Building Leaders, a network of communities in B.C. that are advancing building energy policies, both locally and through joint action. Ellen's expertise also includes community energy and spatial planning, scenario development, visual communications and public process facilitation.

Stephen Sheppard, Collaborative for Advanced Landscape and Planning



Dr. Stephen Sheppard teaches in sustainable landscape planning, aesthetics, and visualization in the Landscape Architecture programme and Department of Forest Resources Management at UBC. He directs the Collaborative for Advanced Landscape Planning (CALP), a research group using perception-testing and interactive 3D visualization tools to support public awareness-building, policy change, and collaborative planning on climate change and sustainability issues. He has over 25 years' experience internationally as a consultant in environmental assessment, visual resource management, planning, and public participation with Dames & Moore and EDAW.

He has published three books on visual simulation and aesthetics, and was a reviewer of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Recent research projects lie in visioning and communicating local climate change futures, public perceptions of sustainability, and ethical visualization techniques.

Thoreau Rory Tooke, Collaborative for Advanced Landscape and Planning



Rory is a project manager and research scientist with the Collaborative for Advanced Landscape Planning at UBC. His experience and research focuses on data analysis for the sustainable management and planning of built environments. He has collaborated extensively with local governments to develop tools and materials to help evaluate and implement sustainability initiatives. Recent projects include the District of North Vancouver's award winning 'Solar Energy Calculator' and the interactive 'Community Energy Explorer' website. His specific interests and expertise include innovative spatial analysis and the bridging of technology and policy to inform clean energy strategies. Rory holds an MSc and PhD in resources management from the University of British Columbia.











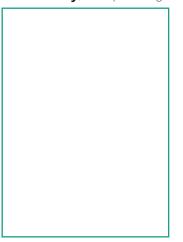


**Brent Gilmour**, QUEST



In his role as Executive Director for Quality Urban Energy Systems of Tomorrow (QUEST), Brent Gilmour MCIP, RPP is responsible for advancing the implementation of the QUEST vision and providing the overall leadership for the successful deployment of research and education to support Integrated Community Energy Systems in Canada. Brent was involved with the initial launch of QUEST in 2007 when he was with the Canadian Urban Institute's (CUI) in the capacity of Vice President, Urban Solutions. Prior to joining the CUI, Brent was the Strategic Coordinator responsible for the establishment of the University of Toronto's Sustainability Office (USO) and was an independent research consultant specializing in community energy innovation. Brent is a registered professional planner with more than seven years of specialized knowledge in the areas of integrated community energy, transportation and land-use planning; downtown revitalization; and, public infrastructure investment. He is a passionate champion for sustainable development and is active in many issues that are advancing Canada's productivity and urban advantage.

**Trent Berry**, Reshape Strategies



Trent Berry is a professional economist specializing in policy development, project evaluation, strategic planning, market analysis, and technology assessment. With a background spanning economics, science and management, Trent brings a unique mix of technical, managerial and communication skills to his consulting practice, including excellent research, modeling, and facilitation skills. His experience includes energy, water, wastewater, air, forestry and land use applications, but he has specialized expertise in gas and electricity industries, utility pricing, advanced economic evaluation techniques, and the development of economic instruments to support environmental policy.

Frank Carnevale, SustainCo



Frank Carnevale is Senior Vice President, Strategic Developments & Communications for SustainCo Inc. With over 25 years of government, energy and infrastructure experience across Canada, Mr. Carnevale is thought leader in the industry, and focuses on investment, development and acquisition opportunities, strategy, strategic channels and growth opportunities for SustainCo Inc. and its companies. Mr. Carnevale has packaged and originated sustainable energy and infrastructure solutions for business-to-government and business-to-business for various developers, clean tech and energy and infrastructure companies. He has originated over \$100 million in energy retrofit contracts in the municipal and social housing sectors, and has managed stakeholder communications and government relations for some of the largest clean, renewable power projects and infrastructure build.













Jeff Fisher, UDI



Jeff Fisher is the Deputy Executive Director and Senior Policy Advisor for the Urban Development Institute (UDI), Pacific Region. He joined the Institute six years ago as the Director of Municipal Affairs and Research, and is responsible for UDI's relations with local governments – including the Institute's numerous Municipal Liaison Committees. He sits on several Provincial Government committees such as the Development Finance Review Committee.

Prior to joining UDI, Jeff was a Senior Policy Advisor with the Association of Municipalities of Ontario. In his capacity he was involved in numerous issues including, Building Code reform, and the development of a new Ontario Municipal Act, pension governance, labour issues and emergency services. Jeff has also worked in the Legislative Assemblies of Ontario and British Columbia and the Canadian Urban Institute.

Greg Mitchell, PCI Group



Greg Mitchell is a member of the Planning Institute of British Columbia and the Canadian Institute of Planners having graduated from Queen's University with his Masters of Planning. He has worked in the planning industry for more than 10 years in institutional and municipal planning, development and planning consulting, and now development. His approach to development and related planning functions is to focus on pragmatic and realistic solutions with an emphasis on practical and implementable sustainability and community engagement. Greg is a new father but still finds time to train for triathlon, volunteer in the community, and travel the world.

Chris Baber, City of Vancouver



Chris Baber managed the development and operations of the Neighbourhood Energy Utility (NEU), which supplies low-carbon energy for space heating and hot water to the Southeast False Creek Neighbourhood. The NEU is a financially self-sustaining utility owned by the City, and utilizes waste heat recovered from sewage to achieve significant GHG emission reductions. The NEU currently serves 3.5 million square feet of mixed-use building development, and is rapidly expanding to serve new developments.

In addition to this Chris is responsible for the implementation of the Vancouver Neighbourhood Energy Strategy, with the goal of establishing new networks in high density areas to reduce GHG emissions by more than 120,000 tonnes CO2 per year by 2020. Implementation activities are currently underway for the Downtown and Cambie Corridor areas, leveraging private sector capacity, economies of scale and local renewable energy sources to secure affordable low-carbon energy for residents.













Jason Owen, City of Surrey



Jason Owen, PEng, is the district energy manager for the city of Surrey, B.C. He is a professional engineer and urban planner with a background in municipal infrastructure, green buildings, community energy planning and renewable energy systems. Owen has a Bachelor of Science degree in civil engineering from McGill University and a Master of Science degree in urban planning from the University of British Columbia. Before entering the public sector, he worked as a consulting engineer in the fields of municipal infrastructure and building science.

Ben Themens, City of North Vancouver



Robin Petri, Wesgroup

Ben Themens currently occupies two positions at the City of North Vancouver; he is Director of Finance of the City as well as Executive Director of the Lonsdale Energy Corporation (LEC). LEC is a wholly-owned City corporation that provides energy for space heating and cooling and domestic hot water to various buildings in three service areas of the City of North Vancouver located in Lower and Central Lonsdale as well as in the Marine Drive / Harbourside neighbourhood.

Ben combines expertise in financial management, engineering and project management in his roles with the City. In addition to being an accredited Professional Engineer and Chartered Professional Accountant (CGA), Ben holds an MBA as well as a Post-Graduate Diploma in Management for the Asia Pacific Region (APMCP) from Capilano University. Ben has worked at all levels of government (municipal, regional, provincial and federal) as well as within various private organizations.



Robin Petri spends her work days building the New River District community in the southeast corner of Vancouver. River District will eventually include residences, schools, community centre, childcares, 25 acres of park and open space and shopping and services for daily living and community gathering. The community will be connected via streets, bike and pedestrian paths, and a neighbourhood energy system.

Prior to joining Wesgroup in 2010, she worked at the City of Vancouver Engineering Department and Southeast False Creek and Olympic Village Project Office. Robin has a Bachelor of Civil Engineering from McGill University and a Master of Environmental Engineering from the University of British Columbia.















Sara Muir-Owen, Pacific Institute for Climate Solutions



Sara Muir Owen has Bachelor of Science in Agriculture and a Masters of Landscape Architecture from the University of British Columbia. She has over a dozen years of experience in sustainable community planning and has worked in Vancouver, Aspen, CO and Santa Fe, NM. She has been involved in numerous award-winning projects including the American Society of Landscape Architect's Project of the Year 2005 Award for the State of Nevada I-80 and I-15 Landscape and Aesthetics Corridor Plan and the Canadian Institute of Planner's 2010 Planning Excellence Award for the City of North Vancouver 100 Year Sustainability Vision. In 2010, Sara joined the Pacific Institute for Climate Solutions (PICS) as the University of British Columbia (UBC) program manager. PICS is hosted and led by the University of Victoria in collaboration with the UBC, Simon Fraser University and the University of Northern British Columbia. PICS develops innovative climate change solutions through multidisciplinary scholarship and research programs with partnering universities, provincial and local government, non-profit organizations, and the private sector.























