

Actual Performance in Buildings Stream

The Actual Performance Stream will focus on the necessity to measure, verify & report data in order to improve building performance. Actual data from GREEN UP projects and LEED certified buildings will provide the basis for discussions led by industry experts.

CaGBC: LEED EB:O&M and GREEN UP program updates

LEED Team Staff

Wednesday, June 9th 09:30-10:30

Overview of existing LEED programs and updates on upcoming releases. Staff to provide information and respond to delegate questions.

Abondance Montréal: Performance monitoring results in a net-zero energy building

Alex Hill

Wednesday, June 9th 10:45-11:45

Abondance Montreal – le Soleil is Canada's first 100% solar-powered inner-city multi-unit residential building. It is a winner of the CHMC's Equilibrium competition and is currently being monitored to determine its energy performance. The session will present Abondance Montreal's energy performance to date, and explain the design and interaction among building systems to achieve net-zero energy status on a confined urban lot.

Starting a Grand Journey - The first 6 months energy performance at Enermodal's new high performance office building

Brian Pescod & John Kokko, Enermodal Engineering Ltd.

Wednesday, June 9th 16:30-17:30

Construction of Enermodal Engineering Ltd's new 23,000 sq ft office building (Kitchener, Ontario, Canada) was completed in Autumn 2009. The building was designed to achieve a high level of energy performance, including features such as variable-refrigerant-flow air-source heat pump heating and cooling, occupancy sensor controlled energy recovery ventilation system, and high performance lighting and building envelope. The project is expected to be one of Canada's most energy efficient office buildings. This session will review the significant energy conservation features of the building and will provide an overview of the metered energy performance during the first six months of operation

Greening Existing Structures: Why, How & What Gives Us Headaches

Guy Favreau, Aedifica

Thursday, June 10th 09:45-10:45

This lecture will attempt to explain processes and challenges behind creating and implementing green solutions, procedures and performance verification methods in existing buildings. We will share our experience through seven different projects that we grouped in 3 sections: corporate organizations, cooperative housing and commercial interiors. Key issues: opportunities and constraints in design process encountered when preserving structures of modern and industrial heritage, tools and practices used to verify performance and maintenance of sustainable buildings, increasing expectations in competitive world of sustainable construction cause by growing popularity of suitability trends, importance of teaming up with all parties involved in project completion, challenges we face as designer, politicians and urban planners when approaching issues of durability in existing buildings.

Session to be confirmed

Thursday, June 10th 11:00-12:00

Learning from a Platinum "Beta" site

Sarah Chernis & Glen Klym, Smith Carter Architects & Engineers

Thursday, June 10th 14:30-15:30

A retrospective of lessons learned during project design and through 5 years of living in and learning from our LEED platinum certified office building. SC3 was designed as an active beta site to allow an interdisciplinary team of

designers and opportunity to test materials, challenge original design assumptions and interpret results from sustainability modeling in comparison with real world conditions. The session will discuss the results from investigations into water saving initiatives, daylight modeling, transportation management, and the cold climate sustainable site research.

Economics & Innovations Stream

This stream explores the business case for building green and the role of buildings in the green economy. Innovations and new technologies play a premier role in green building design, construction and operation. The latest innovations and education will be highlighted

When Green means Business: How Striving for Sustainable Facilities can pay off

Debby Baxter, LoyaltyOne

Wednesday, June 9th 09:30-10:30

Join Debbie Baxter, Chief "Sustainability" Officer of LoyaltyOne, operator of North America's largest loyalty program AIR MILES, as she discusses the challenges of situating 40% of a large workforce in LEED certified buildings by the end of 2009, and 85% by the close of 2010. More specifically, hear about the processes of planning for a new Gold LEED prospective 50,000 sqft building with the largest rooftop solar array in all of Canada. Learn about the ups and downs of getting the building, set to open in November 2009, approved, and how a total corporate commitment to sustainable buildings is paying off in the short, and long, run.

Environmental and Social Performance of the Canadian Real Estate Sector

Simon MacMahon, Jantzi sustainability

Wednesday, June 9th 10:45-11:45

In December of 2009, Jantzi-Sustainability will be releasing the results of its benchmarking analysis of the corporate responsibility and sustainability (CR&S) performance of the Canadian real estate sector. This analysis covers green building performance as well as the full range of environmental and social policies, programs & procedures. The study included the largest 15 REITs and REOCs in Canada as well as five international sustainability leaders in the real estate sector. The analysis was supported by REALpac and augmented by the participation of a number of Canadian companies that wished to provide greater levels of disclosure. The results provide a snapshot of current environmental and social performance and best practices among Canadian companies and compares Canadian performance levels to those found in Australia, the UK and the U.S

The ABC's of Delivering 18 LEED Schools concurrently

Louis Aussant & Andrew Bond, GEC Architecture & Bird-Graham Schools

Wednesday, June 9th 16:30-17:30

These 18 schools were designed, constructed and commissioned within 20 months of contract award. Project highlights include:

economies of scale in design, detailing, collaborative procurement and management; shared knowledge and experience among entire project delivery team; contribution to green economy; commitment to durability and ongoing maintenance impacted design decisions due to 30 year maintenance contract.

The Economics of Sustainability: A Panel Discussion

Speakers TBC

Thursday, June 10th, 09:45-10:45

This dynamic panel will examine the topic of the economics of sustainability from different perspectives. The panelists include private and public sector reps, a designer, a contractor and a project management rep. Each panelist will discuss how they position the relative and real costs of sustainability on projects. Real case studies will be incorporated into the discussion.

Solar Architecture in Atlantic Canada: Reshaping the Icons

Alexandre Pavlovski, Green Power Labs & John Crace, WHW Architects

Thursday, June 10th, 11:00-12:00

Three projects are presented as examples of collaboration by solar architects and energy engineers in deploying the Solar Architecture concept to reshape the built environment in Atlantic Canada: Joggins Fossil Centre, Maritime Centre RE-invented, Solar Architecture concept for Dalhousie University Master Plan.

Calgary Airport International Facilities Project: An Economic Analysis of Rainwater Harvesting

Rhiannon Evison, AECOM

Thursday, June 10th, 14:30-15:30

Rainwater harvesting, a unique green alternative to using potable city water, is an application encouraged by environmentalists worldwide. In this process, rainwater is collected, stored, cleaned and depending on the client requirements, can be used for irrigation, vehicle washes and as a water source for water closets and urinals. The Calgary Airport International Facilities Project will incorporate various sustainable technologies, including rainwater harvesting. A comprehensive economic analysis of the proposed system design will be presented, demonstrating the basis behind the decision to incorporate the novel water saving technology as part of the airport expansion.

Green Practices for New Construction Stream

This program stream emphasizes innovative design and construction practices and technology applications for new buildings including multi residential buildings. An emphasis on challenges & solutions of recently constructed buildings will provide concrete examples of best practices

LEEDing the Contractors

Cam Munro, Clark Builders

Wednesday, June 9th 09:30-10:30

"LEEDing" the contractors is a presentation based on how a general contractor performs on LEED projects over the last few years. From the involvement of IDP meetings, costing and value engineering prior to construction, the bidding stage, choosing the right subcontractor and supplier, onsite requirements for waste management, indoor air quality and sedimentation control and final paperwork and submittals.

Session to be confirmed

Wednesday, June 9th 10:45-11:45

CaGBC LEED NC 2009 Update

LEED ND Update

Wednesday, June 9th 16:30-17:30

The LEED NC 2009 rating system will be released in early spring. This session will offer an overview of the changes and a chance for delegates to pose questions to those responsible for the rewrite.

Meeting the Challenge: Three Living Building Case Studies

Brenda Martens, Recollective Consulting, Alberto Cayela, Stantec, & Karen Marler, Hughes Condon Marler

Thursday, June 10th 09:45-10:45

The Living Building Challenge consists of 16 prerequisites, including a rigorous materials "red list" and radius requirement, net-zero energy use, net -zero non-potable water use and zero waste water discharge. Three case studies of projects that are being designed and constructed to meet these prerequisites will be presented. The Centre for Interactive Research on Sustainability (CIRS) at UBC, Okanagan College's Centre of Excellence and SFU's UniverCity Childcare. These projects vary in size, program and locale from semi-arid to temperate rain forest and in their unique approaches to meeting the LBC.

Mixed Use LEED Developments and urban Renewal

David Dove, Busby Perkins + Will

Thursday, June 10th 11:00-12:00

Mixed-use projects are vital to the health and diversity of any community and enable architects to explore innovative and synergistic design strategies. David Dove will present lessons learned from 3 developments

pursuing LEED gold certification in Vancouver. Cross Roads development houses large format food and drug stores, commercial retail units, two restaurants, rental office space and market residential uses. The City of Vancouver Mount Pleasant Community Centre exemplifies how a civic facility can combine multiple uses on a tight urban site. Finally, Marine Gateway development builds on the success of Cross Roads but also include theatre space and rental housing.

Building durability - Building for today, adapting for tomorrow

Jamie McKay, Morrison Hershfield Ltd.

Thursday, June 10th 14:30-15:30

To allow today's buildings a role in tomorrow's communities, we need to build them to last and be adapted, rather than demolished. Although durability is considered a backbone of sustainability the durable building credit (MRc.8) is often dismissed as too complicated, costly or legally risky. The presenter outlines, via examples, a sample Durability Plan and tables, and the logical steps to develop and confidently achieve this credit. To further our commitment to LEED community, all attendees will be provided an open source for Durability Plan and Tables.

Policy & Procedure Stream

Corporate social responsibility and sustainability policies are hot topics but what are the policies & procedure supporting these initiatives? This program stream examines what is being done in Canada and beyond our borders to ensure that discussions can move towards actions

Large Scale IDP - A Sustainable City Plan: Our Winnipeg

Amanda Dunnigan and Michelle Richard, City of Winnipeg

Wednesday, June 9th 09:30-10:30

The decisions we make today will have significant impacts on the kind of city we leave to future generations. Explore significant opportunities, changes and challenges involved in creating a new 25-year development plan - OurWinnipeg. The integrated design process involved the Province, City of Winnipeg elected officials and members of public service whom actively collaborated alongside citizens, organizations and businesses via "Speak up Winnipeg the most interactive, participatory and transparent planning exercise ever attempted in our city. By presenting the outcomes and strategies derived on topics ranging from residential development to transportation to urban design, we will discuss the research, forecasts and recommendations needed for strong, meaningful and sustainable future.

QUEST - Responding to the Energy Challenge of Canadian Communities

Tonja Leach, Victoria Smith, John Tuner

Wednesday, June 9th 10:45-11:45

Across Canada, an increasing number of communities are engaged in the process of sustainable community development. The approach taken by each community is varied relative to their overall understanding of sustainability issues, planning interests, and energy availability and use, as well as greenhouse objectives. Among the most common approaches used in Canada to integrate energy issues associated with transportation, supply and end-use into decision-making by municipalities is the use of integrated community energy plans (ICEPs). Central to the success of ICEPs is the identification of demand and conservation side management practices, including improved building energy efficiency, the integration of renewable and local energy sources, and engaging a community to manage its own energy use more effectively.

International Panel

Speakers TBC

Wednesday, June 9th 16:30-17:30

Description to come shortly.

LEED: Big questions, Straight answers

Moderated by Mark Luciuk, Morrison Hershfield

Thursday, June 10th 09:45-10:45

This is an opportunity to ask questions and get straight, honest answers about LEED. A 5 person panel of highly experienced LEED specialists will answer audience questions. The session is moderated to ensure appropriate and challenging questions. The intent of the session is to better communicate information about LEED, including the assessment process, existing LEED tools, the relationship to the USGBC suite of LEED tools and the future of LEED.

Session to be confirmed

Thursday, June 10th 11:00-12:00

RealPac Panel discussion- CaGBC Tools to meet the challenge goals - GREEN UP

Speakers TBC

Thursday, June 10th 14:30-15:30

This panel will update participants on the RealPac 20 by '15 challenges and the tools available to meet these stringent goals

Sustainable Cities & Communities Stream

For communities to be truly sustainable there must be integration at all points in the design build process. This stream examines important elements for sustainable communities and highlights effective models of sustainability.

The Architecture of Engagement

Jim Taggart, SAB Magazine

Wednesday, June 9th 09:30-10:30

Sustainability is as much a cultural project as an environmental one. It requires us to embrace common values, develop mutual respect and a sense of shared responsibility. In support of these objectives, building design must not only be measured against the prevailing quantitative goals of energy, water and materials conservation, but against qualitative goals as well. This presentation will draw on case studies from Sustainable Architecture an Building magazine (SABmag), SABHomes and the SAB Awards Program to present examples of both quantitative and qualitative best practice in Canadian sustainable design.

Live, Work & Learn Locally - Creating a sustainable Campus Community

Nancy Knight, UBC

Wednesday, June 9th 10:45-11:45

UBC is transforming from a commuter campus into a vibrant, sustainable community: 29% of undergraduate students 24% of graduate students and nearly 10% of UBC's full-time faculty and staff live on campus. This is a growing community of people who live, work and learns locally. Nancy will outline a new plan for UBC Vancouver's academic lands (2010-2030). Key policies meet or exceed provincial requirements, maintaining UBC's position as a sustainability leader.

Smart Growth in the Suburbs- A transitional model

Joanne Perdue

Wednesday, June 9th 16:30-17:30

Approximately 80% of Canadians reside in auto-oriented suburbs. This project case study provides a replicable model for transitioning suburbs into vibrant mixed use neighborhoods with densification to support public transit. The project is guided by a comprehensive Sustainability Framework encompassing indicators and targets in social, environmental and economic systems. Through Site Adaptive Planning and the concept of Integrated Resource Management some of the project features include an innovative on-site stormwater management approach that also restores ecological function of streams, densification while retaining 75% of existing forest areas, and on-site decentralized wastewater and energy centers. All buildings will target LEED Platinum.

Lessons from Sweden: How Community infrastructure can reduce carbon footprints

Peter Busby & Blair McCarry, Busby, Perkins + Will Architects

Thursday, June 10th 09:45-10:45

Cities of the future must become more resilient to changes in climate and be able to respond to energy, water and land use shortages. Many architectural and engineering lessons can be extracted from communities in Sweden which have made concerted shifts towards a more renewable energy generation tied closely to other key economic factors. Peter Busby and Blair McCarry will co-present strategies and lessons learned from visiting and working with Swedish community leaders. The presentation will also cover how these lessons can be applied in Canada.

Where to build: Why location matters in achieving deep GHG emissions cuts

Yuill Herbert

Thursday, June 10th 11:00-12:00

The results of a new open source model that measures the effect of land use planning on green house gas emissions will be presented. Using the example of Fraser Valley Regional District where the model was piloted, we will illustrate why, from a GHG perspective, the most important decision is not what to build but where to build. We will demonstrate that land use planning needs to be at the forefront of society's efforts to reduce GHG emissions. This model was developed with support from CMHC and the Fraser Valley Regional District. It can be used to evaluate scenarios for neighbourhoods, community and regional plans.

Masdar City - Building the world's first carbon neutral/zero waste city in Abu Dhabi

Jim Sandoval, CH2M Hill

Thursday, June 10th 14:30-15:30

We know global climate changes are causing environmental deterioration. We are changing our lifestyles; adapting socially to reduce environmental impact, targeting renewable energy resources, implementing innovative technologies to reduce, reuse & recycle our limited supply of resources, designing and building sustainable homes and workplaces.

Can we expand all these sustainable approaches and integrate them into one development? Introducing Masdar - the world's first full scale carbon neutral/zero waste city in UAE. This presentation will provide an overview of this showcase project and the creative planning and state of the art technologies that make this project a global archetype for sustainable development.

LEED Canada for Homes Stream

The launch of LEED Canada for Homes has led to an increased demand for energy and water efficient dwellings. The Homes Stream features speakers who are at the forefront of the industry and responding to the unique issues for the residential home builder and the consumer. Sessions will move beyond the doorstep to explore issues of sustainable neighbourhood development

Options for Building Green Homes: Steps in a learning Process

Speaker to be confirmed

Wednesday, June 9th 09:30-10:30

Many options exist for building verified green homes, EnerGuide, R2000, BuiltGreen, Passiv Haus and LEED Canada for Homes are all programs that will verify some part of a home's performance. Come find out what each program measures, what costs are involved in each and what program may best be suited to your project at this point.

Incorporating LEED for Homes into sustainable communities

Robert Smith & Derek Hikson

Wednesday, June 9th 10:45-11:45

This presentation will highlight innovations from inspiration – the Minto eco-home through to mainstream application of LEED for Homes into a production builder's portfolio. Case study format will engage the audience and provide insight into the new rating system.

Little House, Big House: How the home size adjustor helps larger houses reduce their footprint and rewards smaller homes.

Chris Higgins, Troy Glasner, Allison Ashcroft & Nick Kerchum

Wednesday, June 9th 16:30-17:30

LEED Canada for Homes is the only rating system in Canada that takes home size into account when determining the performance of a home. We will hear from a builder of larger homes how the Home Size Adjustor encouraged them to make better choices to reduce the footprint of the home.

BC Hydro presentation

Speakers TBC

Thursday, June 10th 09:45-10:45

Description to come shortly.

Affordable Green Housing - Panel discussion

Speakers TBC

Thursday, June 10th 11:00-12:00

Description to come shortly.

LEED Canada for Homes & Passive Haus standards that compliment.

Guido Wimmers & Troy Glasner

Thursday, June 10th 14:30-15:30

Passiv Haus (passive house) is a very successful approach to building the most energy efficient homes and buildings, LEED Canada for Homes is a globally successful rating system that measures reductions in energy, rewards reduced water consumption, rewards better indoor air quality, better materials selection, better treatment of the softscapes and rewards better locations. Passive house worldwide almost 20,000 buildings gaining strong popularity and is a standard focusing on energy efficiency and is complementary to LEED Canada for Homes. This session will give an overview of the Passiv Haus standard and how it works well with LEED Canada for Homes.

Master Speaker Series Stream

The Master Speaker Series showcases the pioneers of the Green Building movement. Speaking with years of experience and vast project portfolios these experts will share their views on the state of the industry in Canada and the issues at the forefront.

Caron Zero Communities - From Ideology to Practice

Kevin Hydes

Wednesday, June 9th 09:30-10:30

As the movement shifts from single building to communities, the green building industry is rapidly re-tooling to better understand and design infrastructure to create a new generation of carbon neutral/carbon positive and one planet living communities.

This panel will present built projects beginning with the world's first one planet community at Beddington, London; now almost 10 yrs old. Share lessons learned that inspired Canada's own dockside and its 5 year journey and then explore the UK eco-town principles and the Clinton Climate Carbon Positive Communities. The presenters each have a personal history with these projects as well as direct involvement with the next wave of large scale urban projects internationally. Kevin Hydes CEO of Integral and co-founder CaGBC will lead the discussion from his perspective as technical advisor to both Clinton Climate Positive Communities and One Planet Living.

Douglas Birkenshaw

B+H Architects

Wednesday, June 9th 10:45-11:45

A proven design leader within B+H, Mr. Birkenshaw was appointed as a Partner in 2006 and has been with the firm since 1993. He combines his adept architectural visualization skills with hands-on use of advanced architectural and imaging software applications. He has been a lecturer and visiting critic at a number of architectural schools. Douglas has a broad range of experience covering many project types; with a particular focus on institutional

facilities. His work has been recognized with awards from the Royal Architectural Institute of Canada, Ontario Association of Architects and the Design Exchange.

BC Hydro Presentation

Speaker to be confirmed

Wednesday, June 9th 16:30-17:30

Description to come shortly.

Session to be confirmed.

Thursday, June 10th 09:45-10:45

Session to be confirmed.

Thursday, June 10th 11:00-12:00

Session to be confirmed.

Thursday, June 10th 14:30-15:30

Green in the Public Sector Stream

Greening buildings and communities present unique challenges to public sector leaders who must manage bureaucrat procurement policies and political decisions. This stream will highlight challenges & successes in North American cities, programs designed to assist municipalities and how policy makers shape the greening of our communities.

Core Performance Guide Efficiency NB Edition: A Prescriptive Approach to Energy Efficient Buildings Design and Construction

Kate Butler, Efficiency New Brunswick

Wednesday, June 9th 09:30-10:30

The Core Performance Guide Efficiency NB Edition is the result of a concerted effort on the part of Efficiency NB. The Guide was designed to help transform existing commercial design and construction practices towards an energy efficient design and to build energy efficiency capacity among designers, builders, operators and owners; resulting in both reduced energy consumption and GHG emissions. The Guide provides a simplified prescriptive approach, which lists proven measures in order to help facilitate the energy efficient design of buildings to achieve 30% better than MNECB with no energy modeling required. LEED NC relationship is also discussed.

Practicalities of Meeting & Reporting on Building Performance in a P3

Rebecca Holdt & Daniel Boyton

Wednesday, June 9th 10:45-11:45

This session will draw on current experience with a design-build-operate-finance project to explore the challenges of meeting minimum energy performance and LEED certification requirements within the emerging P3 project structure. The presentation will explore the potential for integrating the overall LEED program for a project, including the measurement and verification plan, commissioning work, and energy modeling, with a project's states performance requirements. The session will include a discussion of how to prevent the LEED program from becoming fragmented from overall the contractual requirements and project goals in the context of significant financial penalties.

Municipal Infrastructure Program (CMHC)

Speaker to be confirmed.

Wednesday, June 9th 16:30-17:30

Description to come shortly.

Targeting Carbon Neutral Communities and the role of Policy Makers

Richard MacIntosh, Halsall Associates Ltd.

Thursday, June 10th 09:45-10:45

Buildings consume over 30% of all the energy in Canada and more than half of the electricity. When we consider transportation and our lack of connection to our food, water, waste and commerce, it becomes overwhelmingly evident that green house gas emissions and energy consumption is heavily influenced by how we organize and build our communities. One consistent challenge in current planning and environmental management is that individual problems are typically addressed in isolation. This results in a perceived unmanageable amount of single issue problems that seem unsolved. We will illustrate how community energy modeling facilitates the integration between planners, policy makers and the infrastructure carrying our food, energy, water, waste and residents to or from our communities.

Session to be confirmed

Thursday, June 10th 11:00-12:00

Session to be confirmed

Thursday, June 10th 14:30-15:30