Climate Leader Reader

Supporting BC's Public Sector in Leading by Example



October 2017

Registration now open for the **2017 Public Sector Climate Action Leadership Symposium!**

The Climate Action Secretariat is pleased to once again invite all B.C. public sector organizations to this year's <u>Public Sector Climate Action Leadership Symposium</u>. The event will take place December 7 to 8, 2017 at the University of British Columbia's LEED Platinum certified student union building, the "AMS Student Nest" (AMS = Alma Mater Society).

This year's 2 day event will highlight:

- Innovative ideas for effective climate action in support of Carbon Neutral Government commitments
- Use of low carbon building materials in public sector buildings
- Adapting our infrastructure and services for a changing climate
- Financing emission reduction projects
- Climate policy updates and how they apply to public sector operations

The keynote address will be given by the Honourable George Heyman, Minister of Environment and Climate Change Strategy.

To register or for more information, please visit the registration page.

Infographic: How can your building be made more resilient to Climate Risks?

The Pacific Institute for Climate Solutions, in collaboration with the Climate Action Secretariat, has published a two-page infographic exploring how to strengthen the resilience of buildings to climate change risks. The graphic is most applicable to multi-unit residential and mixed-use buildings. Find the infographic here.

Livable Cities Forum

Presentations from the <u>2017 Livable</u> <u>Cities Forum: Advancing Low Carbon</u> <u>Resilience</u> are now available <u>online</u>. Please click on the presentation links in each session to view.

At the Forum, ICLEI Canada also launched their first mobile game, Get Ready! The game is designed to educate homeowners and residents

about the impacts of natural hazards and extreme weather, and how people can prepare for these events in their homes and lives. It is available on the App Store, Play Store, and online.



Climate Change and Health Backgrounders

Climate change is likely to impact many aspects of our lives, including our health. In British Columbia, the principal hazards include rising temperatures, sea level rise, and increased frequency and intensity of extreme weather events. To learn more, check out the series of backgrounders examining climate impacts and adaptation opportunities in the health sector:

- Overview (PDF, 1 MB)
- <u>Facilities</u> (PDF, 803 KB)
- Communities (PDF, 1.2 MB)
- Public Health (PDF, 1.2 MB)
- Front-Line Health Care (PDF, 967 KB)

NRCan Call for Proposals

Natural Resources Canada (NRCan) is soliciting proposals for cost-shared projects that address a number of climate change adaptation topics including projects that build the capacity of professionals to apply existing information and products to adaptation decisions, or provide resources and guidance to promote the use of adaptation measures in the energy sector.

Funding for this Call comes from NRCan's Climate Change Adaptation Program, which facilitates the development, sharing and use of knowledge, tools and practices to enhance practical action on adaptation. Up to \$8.25 million in funding may be awarded through this process. The Call for Proposals is available for download here. Deadline for submission of proposals is November 27, 2017.

BC Adapts Video Series: Rainwater Management

Climate change is affecting precipitation and storm patterns. As temperatures rise, the atmosphere holds more moisture leading to more intense fall and winter storms. The BC Adapts video series

illustrates actions B.C. communities are taking to adapt to changes in precipitation and storm water patterns, and provides further resources on rainwater management.

Symposium Garden Café: Call Out for Expert Knowledge Sharing

Do you have expertise that you can share with your public sector colleagues at the Symposium? We're looking for people who are willing to share their experiences and expert knowledge at a low-carbon resilience Garden Café. Possible topics include:

- Innovative funding options for emissions reduction initiatives;
- Climate impact assessments, including approaches, tools, and resources;
- Low-carbon building materials using wood and Portland-limestone cement in construction projects;
- Building technologies that improve climate resilience, improve energy efficiency, reduce costs, etc;
- Accessing and using climate data; and
- Building organizational capacity for climate action.

Please contact climateactionsecretariat@gov.bc.ca with your ideas.

SoFi Enterprise— Pilot Phase

The configuration of SoFi Enterprise is complete for the ten organizations that will be helping to test the new software during the pilot phase.

The pilot will begin with an orientation session on October 26, 2017, followed by a training session the next week and testing/debriefing, the following two weeks.

SoFi Enterprise— Transition

Though we are striving to have the new tool operational in time for the close of the 2017 reporting period (early 2018), PSOs should plan to use SMARTTool until further notice.

After the pilot phase, we will have a clearer sense of when and how the full transition will take place.
Currently, we expect a staged transition to the new tool; for example, the first stage could be focussed on data loading and basic reporting, followed by subsequent stages on more advanced features. Stay tuned for an update after the pilot.

We recognize how busy you are at the beginning of the calendar year and are taking this into consideration with respect to the transition and implementation of the new software.

Climate Change Adaptation on CBC

Climate change adaptation has recently been featured on CBC Radio:

In 2050: Degrees of Change,

meteorologist Johanna Wagstaffe takes listeners on a journey to our future in a CBC Vancouver original podcast that explores how our world and lives will adapt to climate change within a few decades.

The Current's new series, **Adaptation**, looks at the surprising, innovative, and sometimes

ill-advised ways to accommodate a rapidly shifting world.

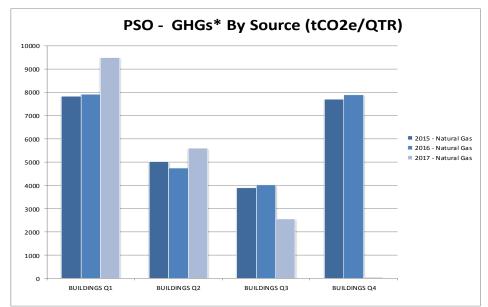
http://www.cbc.ca/radio/ thecurrent/the-current-forseptember-05-2017-1.4274756/iscanada-prepared-for-climatechange-adaptation-is-key-sayexperts-1.4274758

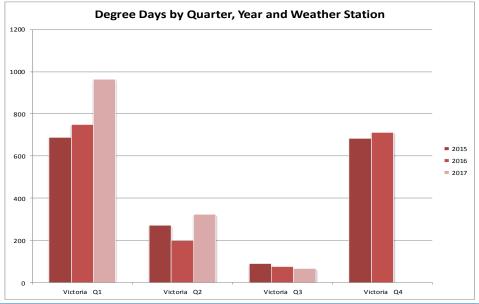
White Coat, Black Art looks at Floods, fires, hurricanes and healthcare: How hospitals cope when disaster strikes.

Asset Management

The September 2017 edition of the Asset Management BC newsletter includes a feature article on 'Managing Assets in the Context of Future "Climate Uncertainty.'

SMARTTool Data Loading for 2017





For the 2017 CNG reporting year, please continue to:

- load consumption/activity data into SMARTTool as usual;
- review and address your EDX error messages to ensure your utility data is up to date.

The next data exchanges for Fortis Natural Gas and BC Hydro will occur on November 10th.

Note that the Beta Analytics tool has been updated to accept your 2017 data and now includes functionality allowing display of quarterly data which can be helpful for both reporting and quality control purposes. The adjacent charts depict some examples. You'll find the tool on the SMARTTool Supporting Documents and Tools webpage.

For questions, please contact Carbon.NeutralApps@gov.bc.ca



HEALTH-CARE FACILITIES

The World Health Organization has identified climate change as the **biggest global health threat of the 21**st century. Here in British Columbia, climate change is clearly observable and many people are already feeling its effects. With some degree of climate change now "locked-in" regardless of mitigation efforts, climate change adaptation is necessary to ensure British Columbia will fare well in the future.

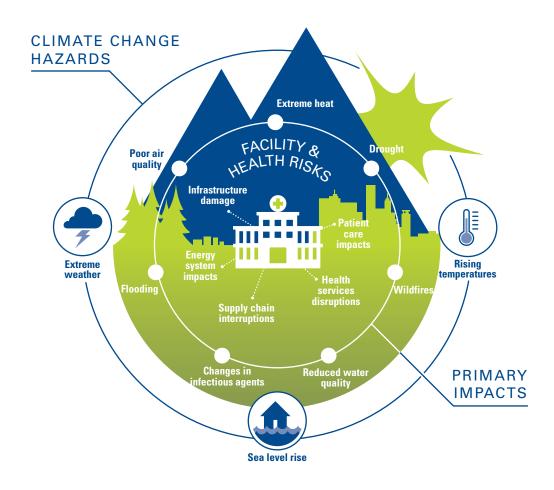
The challenge is significant, but British Columbia is well positioned to respond given strong capacity across different sectors. There are many specific actions that **health care energy managers**, **administrative leadership**, **and other facility operations staff** can take to adapt to climate change. These actions often fall within the day-to-day responsibilities of health care facility managers and leadership, and they also align with the goals of the larger health care community: improving health and well-being outcomes for all British Columbians.

CLIMATE CHANGE AND HEALTH

Climate change is likely to impact most areas of our lives, including our health. Individual and population health are influenced by wider social, cultural, economic and environmental factors. These factors are commonly known as health determinants, and they are closely linked to a range of health outcomes. Increasingly, climate change hazards are impacting health determinants. These impacts in turn influence and affect physical and mental health outcomes.

Climate change affects health care facilities in many ways. Recent heat waves, droughts and wildfires have generated or contributed to negative health outcomes, and impacted health care facilities and services, including damage to infrastructure, interruption of supply chains, and impacts to energy systems. Some of these risks are illustrated in the figure.

Figure: From climate change hazards to facility and health risks



CLIMATE CHANGE ADAPTATION OPPORTUNITIES

Here are some actions that health care facility managers, administrative leadership, operations and maintenance staff can take to prepare for current and future impacts of climate change, and in so doing, support better public health outcomes. Acting today will strengthen our health care system and improve the resiliency of our communities.



PLAN & PREPARE

Climate Risk Assessment.

 Check if your organization is working on a risk assessment. If not, identify the climate risks your facility may be exposed to and determine how well prepared it is. For example, is your facility located in a hazardous area subject to flooding or sea level rise? Is there sufficient operational capacity to maintain a safe work and care environment during a heat wave? The Canadian Coalition for Green Health Care has developed a Health Care Facility Climate Change Resiliency Toolkit, which health care facilities can use to assess their resiliency to climate change (greenhealthcare.ca).

Climate Adaptation Plan.

 After completing a Climate Risk Assessment, develop a strategy to minimize risks and prepare your facility for both short and long-term climate impacts, and climate health emergencies.

Green buildings and infrastructure.

 More sustainable "green" buildings also tend to be more climate resilient in their design features (green roofs, passive cooling and heating systems, energy systems, etc.). Knowing how climate resilient your facility is can help identify retrofit options that reduce the potential for service disruptions.



ΙFΔD

Take the 2020 Health Care Climate Challenge.

• Global Green Healthy Hospitals' 2020 Health Care Climate Challenge is mobilizing health care institutions to protect public health from climate change, with specific actions oriented towards improving facility climate resilience. The group has over 800 members representing over 25,000 hospitals and health centres in over 40 countries. Check to see if your health care facility and/or health authority has joined the challenge. If not, consider how to make it happen.



EDUCATE

Educate and engage staff in climate change adaptation actions.

 Support in-house communications and education on climate change risks and the actions your facility is taking to address them.
 Educated and engaged staff members are more likely to become involved in other climate change adaptation and mitigation activities in the community and at home.

Start a staff engagement program to promote sustainability and resilience actions in the workplace.

 A staff-centered program could offer resources on climate resiliency and opportunities to share practical advice. Island Health's (Vancouver Island Health Authority) Green Champions program, and the GreenCare Green+Leaders program administered by the three health authorities in the Lower Mainland, are two examples.



MONITOR & EVALUATE

Track the results of actions taken.

 Are new systems or programs generating the intended results? Could they be improved?
 Share results and learning with other facility operators and planners.



SUPPORT

Identify and support local sustainability initiatives.

 Support local government sustainability initiatives that generate co-benefits for health outcomes that could be supported through complementary actions on health care facility grounds. For example, local government urban greening programs help reduce local temperatures in summer months and improve air quality. Health care facilities can support these programs through tree planting and greening of facility grounds.

CLIMATE CHANGE HEALTH RISKS

FRONTLINE HEALTH CARE

PUBLIC HEALTH

HEALTH CARE FACILITIES

COMMUNITIES



CLIMATE CHANGE HEALTH RISKS

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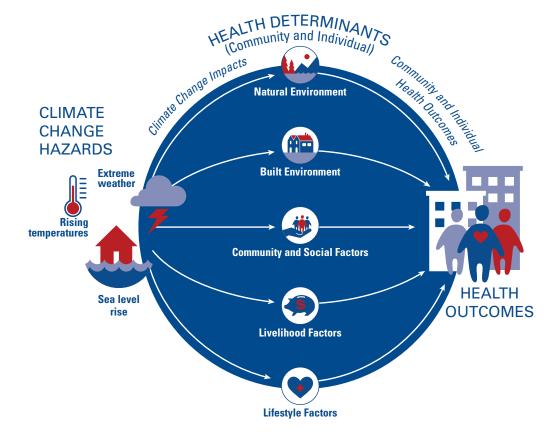
The challenge is significant, but British Columbia is well positioned to respond given strong capacity across different sectors. There are many specific actions that the larger health community can take to respond and prepare for climate change. These actions often fall within the day-to-day responsibilities of the health care community and align with the sector's overarching goal: improving health and well-being outcomes for all British Columbians.

CLIMATE CHANGE AND HEALTH

Climate change is likely to impact most areas of our lives, including our health. In British Columbia, the principal hazards include rising temperatures, sea level rise, and increased frequency and intensity of extreme weather events. These hazards bring new and complex challenges, but by working together, we can increase our collective knowledge base and begin to think more strategically about how best to prepare to protect health.

Population and community health are influenced by wider social, cultural, economic and environmental factors. These factors are commonly known as health determinants, and they are closely linked to a range of health outcomes. Increasingly, climate change hazards are impacting health determinants. As illustrated in the figure, these impacts in turn influence and affect physical and mental health outcomes.

Figure: Climate change hazards and their impacts on health determinants and health outcomes



CLIMATE CHANGE: BC HEALTH RISKS

The table outlines key health and community risks posed by climate change that have been observed in BC. Vulnerable groups such as young children, the elderly, people with existing cardiopulmonary and respiratory illnesses, low-income families and people with mental wellness challenges are at greater risk.

LIMATE CHANGE HAZARDS	PRIMARY IMPACTS	HEALTH AND COMMUNITY RISKS
	Storm surges (temporary flooding)	 Stress, anxiety and trauma Food and water contamination and/or shortages Increased prevalence of water-borne pathogens and contaminants Interruption of health services Increased potential for mold growth Infrastructure/property damage
Sea level rise	Flooding (long-term and permanent inundation)	 Stress, anxiety and trauma Food and water contamination and/or shortages Increased prevalence of water-borne pathogens and contaminants Population displacement Infrastructure/property damage
Rising temperatures	More frequent, severe and prolonged heat waves and urban "heat island" effects	 Decreased air quality due to heat (ground level ozone [smog]) Heat-related deaths Heat-related illnesses such as heat stroke and heat exhaustion Mental health impacts such as stress and anxiety Health care facility impacts such as power outages, rising temperatures in facilities without air conditioning
	Changes in infectious agents, introduction of new pests, longer disease transmission seasons in some areas	 Possible increased incidence and/or prevalence of vector-borne infectious diseases Introduction of new pests affecting food/crop production Possible emergence of new diseases and/or re-emergence of previously eradicated diseases
	Increased production of pollens and spores	 Increased allergies, intensification of symptoms Increased exposure to allergens due to longer allergy seasons
7	Increased frequency and intensity of storms	 Injury, death Stress, anxiety and trauma Food and water contamination and/or shortages Increased prevalence of water-borne pathogens and contaminants Interruption of health services Increased potential for mold growth Infrastructure/property damages
	More frequent, severe and prolonged drought	 Food and water contamination and/or shortages Increased prevalence of water-borne pathogens and contaminants Stress, anxiety and trauma
Extreme weather	Wildfires	 Injury, death Stress, anxiety and trauma Exacerbation of respiratory conditions such as asthma and emphysema due to poor air quality Interruption of health services Infrastructure/property damages

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