

2015 Carbon Neutral Action Report

Executive Summary

Northern Health is pleased to submit our 2015 Carbon Action Neutral Report outlining the actions we have taken to address greenhouse gas emissions in this past year and our plans for the future.

During our 2015-2016 fiscal year, Northern Health implemented energy conservation projects at six facilities, with expected overall energy savings of 2% annually. Other energy conservation projects are already in progress for 2016-2017 at two additional sites. Savings from those projects are expected to reduce our overall carbon emissions by an additional 3%.

Ongoing projects are being funded through the Carbon Neutral Capital Program, with significant incentive contributions from FortisBC and program support from BC Hydro. Projects have been done at more than twenty facilities over the last seven years, including remote sites such as in those in Dease Lake and Stewart which rely on expensive propane for winter heating.

As we move forward into 2016, we're continuing our efforts to identify the best available opportunities to reduce carbon emissions. Northern Health remains committed to sustainable actions and leaving a healthy environment for the future populations of northern British Columbia.



Cathy Ulrich

President and CEO, Northern Health

2015 Greenhouse Gas Emissions

Heating, lighting, ventilation and other building operations necessary to maintain a healthy patient and workplace environment resulted in the emission of 20,774 tonnes of carbon and carbon equivalents into the atmosphere. Paper consumption resulted in an additional release of 364 tonnes of carbon equivalent emissions. Fleet vehicles resulted in an additional release of 739 tonnes of carbon equivalent emissions. In total, Northern Health had a measured carbon footprint of 21,876 tonnes for the delivery of quality healthcare in the most challenging climate in the Province.

Offsets Applied to Become Carbon Neutral in 2015

NHA's total carbon footprint for 2015 was 21,876 tonnes, 21,845 of which are offsetable. Northern Health purchased 21,845 tonnes of carbon offsets to counter the emissions identified above, thereby achieving carbon neutrality in accordance with government legislation

Thirty-one tonnes CO₂e of emissions resulting from the combustion of bio-fuel were reported as part of our emissions profile in 2015. However, they were not offset as they are considered carbon neutral in accordance with the government carbon accounting legislation.

Emissions Reduction Activities

Northern Health continued to implement energy conservation projects in 2015 to reduce carbon emissions from its operations. This is a strategic process which began in 2008, with additional opportunities identified through 2018 which will utilize the annual Carbon Neutral Capital Program funding.

Actions Taken to Reduce Greenhouse Gas Emissions in 2015

Important initiatives in 2015 included, improvements to heating boiler systems, replacement of heating recovery system components, implementation of building automation systems improvements, and improving ventilation systems to reduce the amount of wasted energy. All projects result in carbon emissions reductions.

New condensing boilers and a building automation system were installed at the Stikine Health Centre in Dease Lake, resulting in a 50% drop in propane use and carbon emissions.

Plans to Continue Reducing Greenhouse Gas Emissions 2016

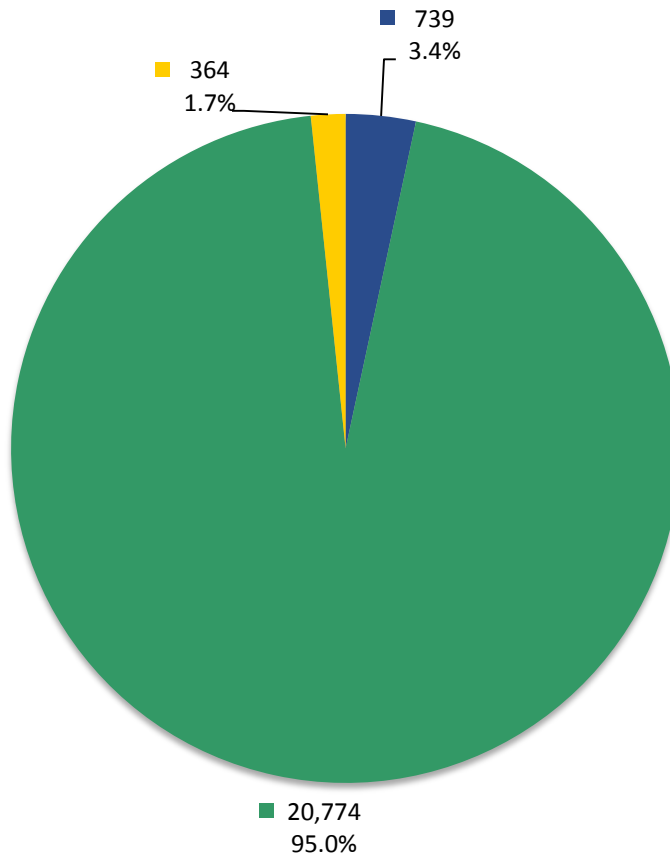
In 2016, two larger projects are being implemented in Quesnel and Prince George. The focus of these projects is better control of heating systems with a resulting increase in plant efficiency. Funding is again being provided through the Carbon Neutral Capital Program. Additional funding is being provided by FortisBC. Natural gas savings of more than 12,500 GJ are expected, which will reduce our overall carbon emissions by 3%.

Significant opportunities remain to save additional natural gas and propane by improving building heating and ventilation systems. As part of our strategic focus on managing energy and carbon emissions, we have already identified opportunities for energy conservation projects in future years.

Capital investments made at facilities to improve energy performance over the last seven years are resulting in annual cost savings of more than \$1 million. These projects have helped reduce our overall carbon emissions by 9%, even despite an increase in the total floor area that Northern Health operates. Most of Northern Health's owned facilities are older than 1965, and built to the energy efficiency and engineering standards of the day and as a result, high reward energy savings projects are becoming more and more difficult to develop. Further, as our carbon offset payments are reduced, our Carbon Neutral Capital Program grant funding is also reduced.

Northern Health continues to receive support from our utility partners at FortisBC and BC Hydro, who provide funding for personnel, programs and projects. In addition, in 2016, we have expanded our capacity to manage facilities through the hiring of two additional managers to work alongside the Director of Facility Maintenance, Energy and Environmental Sustainability.

Northern Health Authority Greenhouse Gas Emissions by Source for the 2015 Calendar Year (tCO₂e*)



Total Emissions: 21,876

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2015 (Generated May 25, 2016 9:37 AM)

Total offsets required: **21,845**. Total offset investment: **\$546,125**. Emissions which do not require offsets: **31** **

*Tonnes of carbon dioxide equivalent (tCO₂e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

** Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

2015 Carbon Neutral Action Report Survey

Organization Name:

Northern Health Authority

Please select your sector:

- Health Authority or Affiliate

1) Stationary Sources (Buildings, Power Generators, Ext. Lighting) Fuel Combustion, Electricity use, Fugitive Emissions:

Please indicate which actions your PSO took in 2015:

Have developed an overall strategy/plan to reduce energy use in your organization's buildings inventory:

Yes

If Yes, please describe:

Northern Health has a Strategic Energy Management Plan which is updated annually. In addition, Capital Planning directors and other energy team members meet quarterly to review progress and ongoing commitments to reduce greenhouse gas emissions through energy conservation projects.

Undertook evaluations of building energy use:

Yes

Performed energy retrofits on existing buildings:

Yes

Built or are building new LEED Gold or other "Green" buildings:

Yes

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from buildings:

(No response)

2) Mobile Sources (Fleet, Off-road/Portable Equipment) Fuel Combustion:

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to support systematic reductions in fleet related emissions:

(e.g., program to convert fleet to renewable fuels)

No

If Yes, please describe:

(No response)

Replaced existing vehicles with more fuel efficient vehicles (gas/diesel):

Yes

Replaced existing vehicles with hybrid or electric vehicles:

Yes

Took steps to drive less than previous years:

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from fleet combustion:

(No response)

3) Supplies (Paper):

Indicate which actions your PSO took in 2015:

Have put in place an operations policy/program to facilitate a systematic reduction in paper-related emissions:

(e.g., policy to purchase 100% Recycled Content; default to double-sided printing)

No

If yes, please describe:

(No response)

Have put in place an operations policy/program to facilitate behavioural changes from paper use:

(e.g. awareness campaign to reduce paper use):

No

If yes, please describe:

(No response)

Used only 100% recycled paper:

No

Used some recycled paper:

Yes

Used alternate source paper:

(e.g., bamboo, hemp, wheat etc.)

No

Please list any other actions, programs or initiatives that your organization has introduced that support emissions reductions from paper supplies:

(No response)

4) Other Sustainability Actions:

Please note that this section is optional

Business Travel

Created a low-carbon travel policy or travel reduction goal:

(low-carbon = lowest emission of greenhouse gas per kilometer per passenger)

(No response)

Encouraged alternative travel for business:

(e.g. bicycles, public transit, walking)

(No response)

Encouraged or allow telework/working from home:

(No response)

Other:

(No response)

Education Awareness

Have a Green/Sustainability/Climate Action Team:

(No response)

Supported green professional development:

(e.g. workshops, conferences, training)

(No response)

Supported or provided education to staff about the science of climate change, conservation of water, energy and/or raw materials:

(No response)

Other:

(No response)

Adaptation Planning for Climate Risks

Have assessed whether increased frequency of extreme weather events and/or long term changes in climate will affect your organization's infrastructure, its employees and/or its clients:

(No response)

Have incorporated these anticipated changes in climate into your organization's planning and decision making:

(No response)

Other:

(No response)

Other Sustainability Actions

Established a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models:

(No response)

Have put in place an operations policy/program to facilitate the reduction and diversion of building occupant waste stream from landfills or incineration facilities:

(e.g., composting, collection of plastics, batteries)

(No response)

Established green standards for goods that are replaced infrequently and/or may require capital funds to purchase:

(e.g., office furniture, carpeting, etc.)

(No response)

Incorporated lifecycle costing into new construction or renovations:

(No response)

Please list any other sustainability actions your organization has taken not listed above:

(No response)