

# R.W. Large Memorial Hospital - 2011 Carbon Neutral Action Report

## Executive Summary



R.W. Large Memorial Hospital is a 3,114 square meter 15 bed Acute/Residential care hospital owned and operated by the United Church of Canada and located on the Heiltsuk First Nation reserve at Bella Bella , also called by the traditional name of 'Waglisla'. Affiliated with VCH, the Hospital provides basic acute care, long term care and medical services. Bella Bella is home to the Heiltsuk First Nation (population 1,500) and the Hospital serves the Heiltsuk , who have lived in the area for over 10,000 years, as well as residents of Denny island, Klemtu and Ocean Falls, transient mariners, loggers and tourists. The community of Bella Bella , or called by the traditional name of 'Waglisla", is located in an area of the central coast of British Columbia coastline called the 'Great Bear Rainforest' and offers some of the world's best fishing, whale watching, kayaking, hiking, and other outdoor pursuits and has a population of 2,000 (Aboriginal and non Aboriginal).

R.W. Large memorial hospital was constructed in 1975 and a number of renovations and upgrades that support and enhance building and energy efficiency were implemented in 1993, 1995, 1996-1997, 2003, and 2010 and these include:

- Boilers and mechanical updated in 1995. (A.2)
- Roof replaced and insulated in 1993. (A.2)
- Exit lights replaced to energy efficient LED lighting in 1996-97. (A.2)
- DDC (Direct Digital Controls) building automation systems installed in 1996-97. (A.2)
- Building envelope replaced and insulated in 2003. (A.2)
- Metal windows replaced with vinyl double glazed windows in 2003. (A.2)
- Total building lighting retrofitted from old and inefficient T12 34-watt fluorescent lighting and magnetic ballasts to energy efficient T8 25-watt fluorescent lighting and programmed-start electronic ballasts. (A.2)
- The Heiltsuk First Nation band is currently in the process of planning for a community-wide recycling . program. (B.6)

We are committed to develop and maintain the best possible practices and policies for the health and safety of our residents, our staff, our community and our environmental health. While we are also committed to implement sustainability and energy efficiency measures and develop collaborative partnerships with external agencies and service providers to reduce our Green House Gas (GHG) emissions and our Carbon Footprint in preparation for carbon neutrality in 2011, our remote and isolated community and financial and staff resources represent challenges to meet our environmental obligations.

**Overview:**

**Actions Taken to Reduce Greenhouse Gas Emissions – 2011**

No key environmental initiatives were implemented in 2011.

**2011 Greenhouse Gas Emissions**

R.W. Large memorial Hospital currently owns or leases the following facility space

Organizational Information as of December 31, 2011		
How Much space (square meters) is within your building portfolio?	<b>3114</b>	usable square meters
How many buildings are in your portfolio?	<b>3</b>	distinct buildings
What percentage of your building portfolio is leased (leased square meters over total portfolio square meters)?	<b>0</b>	percent leased
What percentage of your building portfolio is owned (owned square meters over total portfolio square meters)?	<b>100</b>	percent owned

R.W. Large Memorial Hospital has calculated its 2011 carbon footprint in accordance with the *Greenhouse Gas Reduction Targets Act* (as reported in SMARTTool)

				R.W. Large Memorial Hospital	
				2010 - tCO2e	2011 - tCO2e
<b>Scope 1 - Mobile Fuel Combustion (Fleet &amp; other mobile equip</b>				<b>0.23</b>	<b>0.24</b>
<b>Scope 1 - Stationary Combustion (Reported)</b>				<b>88.06</b>	<b>147.86</b>
<b>Scope 2 - Purchased Energy (Reported)</b>				<b>10.64</b>	<b>11.28</b>
<b>Scope 3 - Office Paper Emissions</b>				<b>4.87</b>	<b>4.99</b>
<b>Emissions from Biomass</b>				<b>0.01</b>	<b>0.01</b>
<b>Total Emissions - Calendar Year</b>				<b>103.81</b>	<b>164.38</b>
<b>Total for Offsets</b>				<b>103.8</b>	<b>164.37</b>

## Offsets Applied to Become Carbon Neutral in 2011

The following Chart indicates the tCO<sub>2</sub>e reported in 2011 as well as the total expenditure on carbon offsets to ensure R.W. Large Memorial Hospital was Carbon Neutral during the calendar year.

	RW. Large Memorial Hospital	
	2010	2011
Total Carbon Footprint - tCO <sub>2</sub> e	104	165
Purchased CO <sub>2</sub> Offsets	\$2,495	\$4,125
Purchased CO <sub>2</sub> Offsets + HST	\$2,906	\$4,620

## Plans to Continue Reducing Greenhouse Gas Emissions 2012

- Staff are continually reminded to be aware of energy usage – turning off lights and turning down the thermostats in the Housing units when not in the apartments to reduce heating costs. This will be addressed again in future staff meetings.(A.2)

While no other key environmental initiatives are planned for 2012, we will continue to investigate and introduce other actions that will contribute to our goal of implementing sustainability initiatives and reducing Greenhouse Gas Emissions (GHG) and Carbon Footprint within our financial and staff resources.

*M. K. J. J.*  
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## Actions Towards Carbon Neutrality

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*.

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
<b>Mobile Fuel Combustion (Fleet and other mobile equipment)</b>						
<b>Vehicle fuel efficiency</b>						
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	0 % of vehicles are fuel- efficient models	discussion on purchasing a new vehicle with authorities	purchase a new vehicle	2012	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	In Development	0 % of vehicles down-sized since start year indicated	not applicable	not applicable	2012	2012
Perform regular fleet maintenance specifically to improve fuel-efficiency	Ongoing/In Progress	100 % of vehicles are subject to regular maintenance for fuel efficiency	not applicable due to remote community	not applicable.	2000	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	In Development	0 % of small maintenance vehicles are fuel-efficient		purchase a new vehicle	2012	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>						
This section is either not applicable, not yet evaluated, or was completed before 2011						
<b>Supplies (Paper)</b>						
<b>Printer/document settings</b>						
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	100 % of network printers or photocopiers are set to automatic double-sided	as per vch policy	as per vch policy	2002	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress	100 % of network printers have 'print and hold' settings applied	as per vch policy	as per vch policy	2002	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress	100	as per vch policy	as per vch policy	2002	No End Date (Continuous)
<b>Electronic media in place of paper</b>						
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	5 % of staff workstations with software installed	as per vch policy	as per vch policy	2010	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress		training staff on how this is accomplished	continue education	2010	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress		training staff on how this is accomplished	continue education	2010	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Completed in 2011		as per vch policy		2002	No End Date (Continuous)
<b>Behaviour change program</b>						

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Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	5	% of staff currently have received collaborative software training	as per vch policy	as per vch policy	2002	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress	5		educate staff - ongoing process	educate staff on going process	2010	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			in process	in process	2008	No End Date (Continuous)

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## Actions to Reduce Provincial Emissions and Improve Sustainability

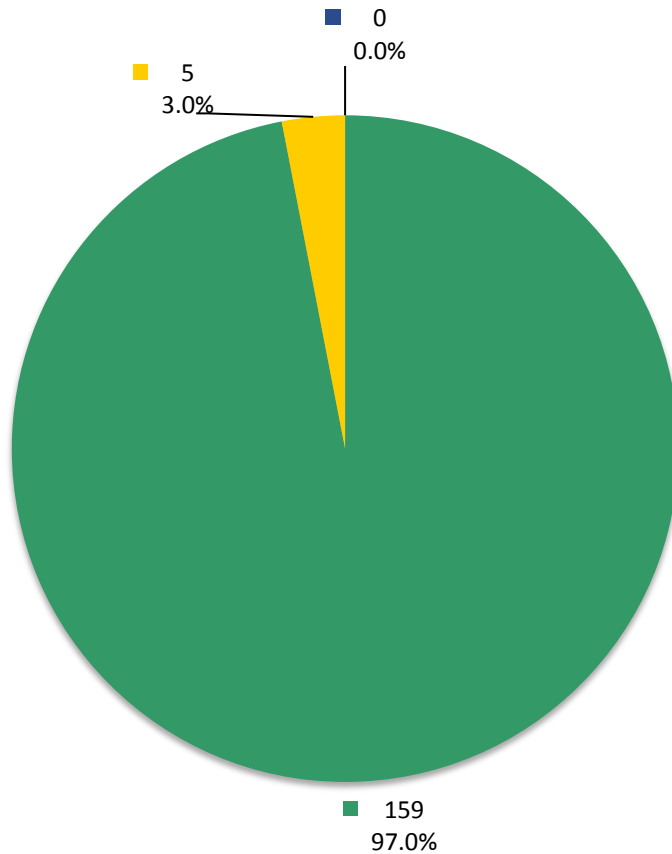
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*. Public sector organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
<b>Business Travel</b>						
<b>Virtual meeting technology</b>						
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	5 % of computers have web-conferencing software installed	installed and used on applicable computers by applicable staff	installed and used on applicable computers by applicable staff	2010	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	5 % of staff have access to a desktop web-camera	installed and used on applicable computers by applicable staff	installed and used on applicable computers by applicable staff	2010	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	100 % of meeting rooms have access to video-conferencing equipment	completed	completed	2008	No End Date (Continuous)
<b>Behaviour change program</b>						
Train staff in web-conferencing	Ongoing/In Progress	5 % of staff are trained web-conferencing	ongoing as required	ongoing as required	2011	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	5 % of staff are trained in video-conferencing or have access to technical support	ongoing as required	ongoing as required	2011	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		ongoing as required	ongoing as required	2011	No End Date (Continuous)
<b>Other Sustainability Actions</b>						
<b>Waste reduction/diversion</b>						
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress		ongoing	ongoing	2010	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		ongoing hazardous waste is shipped per hospital policy	ongoing	Started before 1995	No End Date (Continuous)
<b>Procurement (non-paper supplies)</b>						
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	Ongoing/In Progress		ongoing	ongoing	2010	No End Date (Continuous)
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	Ongoing/In Progress		goods are not purchased frequently due to small size of facility	good sare not purchased frequently due to small size of facility	2011	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress		not applicable due to rural remote nature of communitiy	not applicable due to remoteness	Started before 1995	No End Date (Continuous)

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Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
<b>Building construction, renovation, and leasing</b>						
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress		work with Heiltsuk Nation on program to recycle and reuse	work with Heiltsuk Nation on program to recycle and reuse	2010	No End Date (Continuous)
<b>Indoor air quality</b>						
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress		ongoing per hospital policy	ongoing per hospital policy	2010	No End Date (Continuous)

**RW Large Memorial Hospital  
Greenhouse Gas Emissions by Source  
for the 2011 Calendar Year (tCO<sub>2</sub>e\*)**



**Total Emissions: 164**

- 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 2011 (Generated May 18, 2012 10:57 AM)**

Total offsets required: **164**. Total offset investment: **\$4,100**. Emissions which do not require offsets: **0** \*\*

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) 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.