



## Nisga'a Valley Health Authority 2012 Carbon Neutral Action Report

### Executive Summary

The Nisga'a Valley Health Authority (NVHA) is committed to reducing its greenhouse emissions to keep this remote part of the Province clean and as unpolluted as possible. The NVHA has health centers located in each of the four Nisga'a communities in the Nass Valley in a region that is basically untouched by the level of emissions that are generated in provincial municipalities. However, we are very much aware that we contribute to the emissions that impact the environment we live and work in. As a result, we have increased our awareness of carbon neutrality within the NVHA and are doing what we can to assist in this province-wide initiative. This is a key element of our overall vision that a healthy environment – internally and externally – at all levels of program and service delivery within the organization including this initiative naturally results in healthy minds, healthy bodies and healthy spirits.

### Overviews

#### Carbon Neutral Action Report

As per legislation, the Nisga'a Valley Health Authority is required to complete a Carbon Neutral Action Report (CNAR) for the 2012 calendar year as part of the *Greenhouse Gas Reduction Targets Act* and the *Carbon Neutral Government Regulation*. The report requires the approval of senior management – the Chief Executive Officer – before it is released as a public document and posted on the Provincial Government website. The Nisga'a Valley Health Authority is happy to submit this annual report.

#### 2012 Greenhouse Gas Emissions

The SMARTTool reporting requirements and the Carbon Neutral Action Report are assigned to the Corporate Services Manager for the organization. The Corporate Services Manager is responsible for fleet and buildings management in a role that naturally corresponds and enhances the reporting requirements and the awareness for SMARTTool and the Carbon Neutral Action Report. The Total Emissions, Calendar Year 2012 is 246, Carbon Neutral or Offset Exempt is 5, with a Total for Offsets of 242.

#### Offsets Applied to Become Carbon Neutral in 2012

The Nisga'a Valley Health Authority upgraded the lighting and mechanical systems as part of an expansion project at the Laxgalts'ap Health Centre and upgraded the interior and exterior lighting at the main centre in Gitlaxt'aamiks to reduce electrical consumption and emissions. The lighting at the Gitlaxt'aamiks Health Centre was replaced with energy efficient lighting through an incentive grant with BC Hydro. The upgrade is providing various benefits including reducing electrical consumption, financial savings, and health and safety as the older lighting was emitting so much that it was causing headaches amongst some staff.

As noted, paper consumption is another area that the NVHA continues to focus on in 2012 with the network printing/facsimile/scanning copier machines at all centres to decrease paper consumption. Documents are scanned and emailed to all staff within the organization as well as to outside organizations, and copies of requisite documents are saved electronically in an ongoing effort to go paperless in all departments.

The purchase of a 2<sup>nd</sup> medical bus significantly reduces road travel and greenhouse gas emissions. Having clients travel on the bus significantly reduces the number of vehicles on the highway on a daily basis and saves on fuel consumption. The bus runs Monday to Friday to bring clients to/from Terrace for medical/specialist and dental appointments. It continues to be the NVHA's greatest success story as it has positive impacts on the Nisga'a people, the environment and the NVHA.

The following are additional offsets practiced within the NVHA to reduce emissions:

- Electrical heat at NVHA centres is time-controlled. The system is programmed to lower the temperature at the same time each day and increases the temperature prior to the start of the workday.
- Office lights are turned off when offices are not in use.
- The NVHA recycles paper, old electronic equipment and cans/bottles.
- Videoconferencing units are available within each NVHA center and are used for meetings and training.
- Vehicle Usage Policy was implemented including car-pooling as required.
- Fuel consumption is monitored under NVHA fleet management.

#### **Conclusion**

The Nisga'a Valley Health Authority will continue to increase its campaign to educate staff toward decreasing consumption in all areas to reduce greenhouse emissions and expenditures in these areas as reducing consumptions saves financially. More importantly, it provides for a healthier environment and a healthier Nation of people. Thank you.

Respectfully submitted,



Julia Adams, BA  
Chief Executive Officer, NVHA

Nisga'a Valley Health Authority - 2012 Carbon Neutral Action Report

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	Steps Taken	Steps Planned	Start Year	End Year
Mobile Fuel Combustion (Fleet and other)					
Behaviour change program					
Provide fleet driver training to reduce fuel use	Not Yet Evaluated				No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Ongoing/In Progress	Fleet drivers are aware of anti-idling practices.	Increase anti-idling awareness.	2008	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress	The Nisga'a Valley Health Authority has vehicle usage policy that includes car-pooling.	Increase awareness of car-pooling for all departments within the health authority.	2008	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress	There is no public transport available within the Nass Valley. The NVHA has 2 medical buses that are used to transport clients to/from appointments and other service delivery within the organization.	Continue to review alternative transportation.	2010	No End Date (Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	It was not a requirement to replace any NVHA vehicles in 2012. The NVHA has one hybrid vehicle in its fleet. Fuel efficiency is a factor for all vehicle purchases.	The NVHA will continue to review its fleet and fuel efficiency practices. In addition, due to road conditions and travel in this semi-remote area of the province especially during the winter, all wheel drive or 4 x 4 vehicles are preferred for employee and client safety. One of the considerations is purchasing tidy tanks at 2 of the centres to purchase bulk fuel to reduce the cost of fuel and manage consumption more efficiently.	2008	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	It was not a requirement to replace NVHA vehicles in 2012. Given the extent of employee and client travel that's required and the geography of the area we live in, it's more efficient to purchase larger vehicles. The Nisga'a Valley Health Authority has 4 centres located in each of the 4 Nisga'a communities in the Nass Valley and travelling the Nisga'a highway can be extremely challenging. Smaller vehicles don't handle the road very well especially in the winter. Safety is a factor that must be considered at all times.	The Nisga'a Valley Health Authority will continue to right-size vehicles to meet operational demands and to improve fuel efficiency.	2010	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	The NVHA has devised a fleet maintenance schedule to track vehicle maintenance for each vehicle - changing tires over from winter to all season and all season to winter, the purchase of new tires, rotating tires, oil and filter changes, brake service, wind shield service, air filters, radiator flush and fill, spark plugs, battery checks and any other work that's required. The NVHA fleet is maintained regularly to improve fuel and operational efficiency.	The NVHA will continue to improve its fleet maintenance practices to improve fuel efficiency.	2008	No End Date (Continuous)
Stationary Fuel Combustion, Electricity					
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	Not Yet Evaluated				No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress	Staff are encouraged to unplug electrical equipment or switch off power bars when not in use.	Increase staff awareness of unplugging electrical equipment or switch off power bars when not in use.	2011	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress	Staff are encouraged to close blinds at the end of the work day to reduce heating/cooling demands.	Increase awareness of staff including housekeepers to close blinds at the end of the work day at all centres.	2011	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress	Staff use the air dry setting on dishwashers.	Continue practice of using air dry setting on dishwashers.	2008	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside	Not Yet				No End Date

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
of regular business hours	Evaluated				(Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	Staff are reminded to turn off lights in offices and other areas when not in use.	Continue to remind staff to turn off lights.	2008	No End Date (Continuous)
Promote hot water conservation	Not Yet Evaluated				No End Date (Continuous)
IT power management					
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	Auto-sleep settings are applied on all computer monitors and CPUs.	Continue to apply auto-sleep settings on all systems.	2008	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices as part of a print management strategy	Ongoing/In Progress	The Nisga'a Valley Health Authority installed multi-function - printer, scanner, fax - machines at all centres and encourages all employees to minimize printing and to go paperless - rather than make copies to scan and save to computers.	The NVHA will continue to network print and increase its efforts to go paperless.	2011	No End Date (Continuous)
Apply auto-sleep settings on printers, fax machines, and/or multi-function devices	Ongoing/In Progress	Auto-sleep settings are applied on all multi-function machines.	Continue to apply auto-sleep settings on all machines.	2011	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	Computers are replaced with ENERGY STAR models during regular compuer upgrades.	Continue to replace systems with ENERGY STAR models.	2008	No End Date (Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Not Yet Evaluated				No End Date (Continuous)
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M)	Not Yet Evaluated				No End Date (Continuous)
Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)	Not Yet Evaluated				No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Not Yet Evaluated				No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	The lighting - internal and external lighting - was upgraded at the main health centre in Aiyansh to improve on energy and save on electrical consumption. All systems are serviced/maintained regularly throughout the year.	The NVHA will continue to improve on mechanical and electrical systems. The heating system at the main centre has reached its life expectancy and is bein assessed for replacement. The NVHA is reviewing replacement options including greener heating.	2011	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress	The Nisga'a Valley Health Authority continues to purchase Energy Star model appliances for all centres and residences and utilizes recycle centres for old/burnt-out appliances.	The NVHA will continue to purchase energy efficient appliances and utilize recycling centres.	2008	No End Date (Continuous)
Planning/management					
Reduce office space (square meters) per employee	In Development	The Nisga'a Valley Health Authority is reviewing office moves to maximize space and use space more efficiently. As noted, the NVHA has 4 centres and the same services are offered at every centre, for example, Non-Insured Health Benefits. This year, the entire department was moved to one centre and located in one room that houses the entire department.	The NVHA will continue to maximize office space for all employees and departments.	2012	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Completed (in Reporting Year)	BC Hydro installed SMART meters at all centres and in all NVHA residences.		2011	2012
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	Mechanical systems are serviced/maintained on a quarterly basis at all centres and upgraded as required.	The Nisga'a Valley Health Authority will continue to upgrade mechanical systems.	2009	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In	The lighting was upgraded during an expansion project in	The lighting will be assessed at the remaining two centres in	2011	No End Date

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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
	Progress	Laxgalt'sap. The lighting was upgraded at the main centre in Gitlaxt'aamiks under the BC Hydro Partner Express program.	Gitwinksihlkw and Gingolx.		(Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	Control systems were upgraded at the Laxgalts'ap Centre during an expansion project. Control systems are serviced/maintained on a quarterly basis at all centres.	The Nisga'a Valley Health Authority will continue to maintain control systems and will upgrade systems as required.	2011	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	Building insulation was improved during an expansion project at the Laxgalts'ap Centre and was improved at one of the residences.	Building insulation will continue to be improved as required.	2011	No End Date (Continuous)
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Not Yet Evaluated				No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress	The NVHA encourages staff to hold paperless meetings and presentations. Power point presentatins are provided as much as possible.	Increase the number of paperless meetings and presentations that are held.	2009	No End Date (Continuous)
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Not Yet Evaluated				No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress	Software with shared access including Profile, Outlook and the u:/drive are used for managing appointments, tasks, and filing staff policy and procedures, forms, calendars and other shared documents.	The NVHA will increase its efforts to utilize electronic library document methods to share files.	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	In Development	The NVHA continues to review how paper pay stubs can be provided electronically.	Develop and implement the process to provide pay stubs electronically.	2011	No End Date (Continuous)
Paper Type					
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	The Nisga'a Valley Health Authority purchases recycled paper.	Continue to purchase recyled paper.	2008	No End Date (Continuous)
Purchase 40% post-consumer recycled paper	Ongoing/In Progress	The NVHA purchases recycled paper.	Continue to purchase recycled paper.	2008	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	The NVHA purchases recycled paper.	Continue purchasing recycling paper.	2008	No End Date (Continuous)
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Completed (in Reporting Year)	Double-sided printer settings are applied.		2011	No End Date (Continuous)

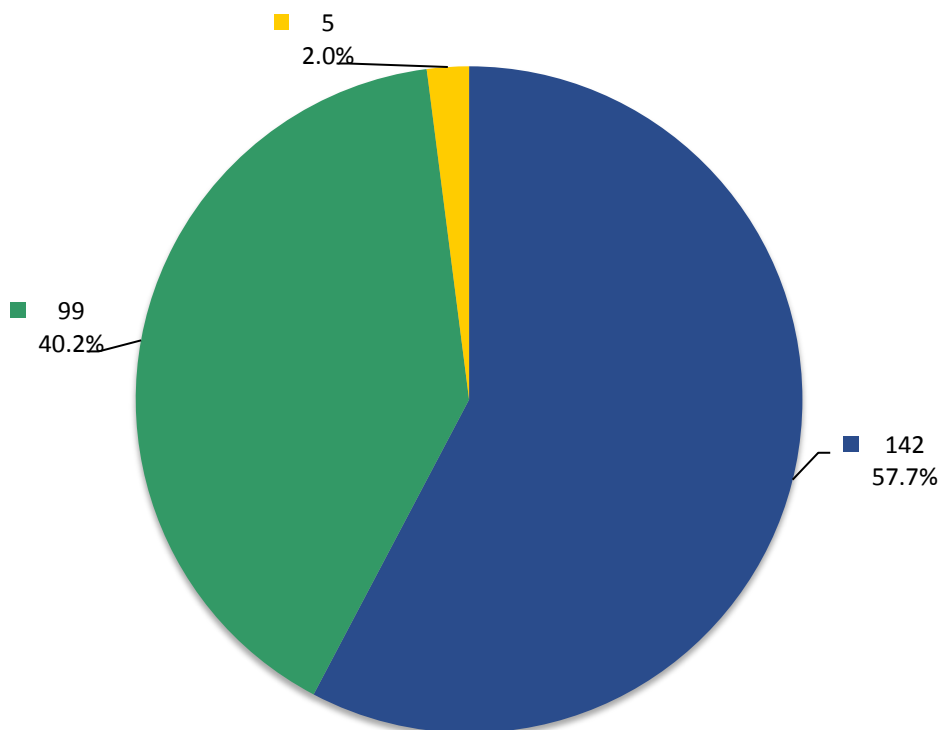
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Actions to Reduce Provincial Emissions and Improve Sustainability					
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act. Public sector					
Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Business Travel					
Behaviour change program					
Train staff in web-conferencing	Not Yet Evaluated				No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	In Development	NVHA staff participate in events via video-conference where possible.	Increase awareness of virtual attendance/presentation at events where possible.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress	The NVHA has vehicle usage policy including car-pooling. Staff are encouraged to car-pool to meetings and other events.	Increase awareness and continue to encourage staff to car-pool.	2008	No End Date (Continuous)
Policy and budgeting					
Create a low-carbon travel policy or travel reduction goal	Ongoing/In Progress	The NVHA continues to assess staff and client travel and amends its vehicle usage policy including meshing schedules to increase car-pooling particularly amongst staff.	Continue to reduce travel thereby reduce fuel consumption and emissions.	2012	No End Date (Continuous)
Virtual meeting technology					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	The NVHA has teleconference and video conference units at each centre and encourages staff to conference when possible/feasible to do so. In addition, staff have Skype installed on systems to increase conference communications.	The NVHA will continue to encourage staff to utilize conference equipment for meetings.	2008	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	Desktop web-cameras are available to those staff who would need it for their area of responsibility.	Increase the availability of desktop web cameras.	2008	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Completed (in Reporting Year)	Video-conferenc units are installed at each of the 4 NVHA centres.		2008	No End Date (Continuous)
Education, Awareness, and Engagement					
Awards/Recognition					
Establish a sustainability/green awards or recognition program	Not Yet Evaluated				No End Date (Continuous)
Staff Professional Development					
Support green professional development (e.g., workshops, conferences, training)	Not Yet Evaluated				No End Date (Continuous)
Include green options in employee performance measurement system	Not Yet Evaluated				No End Date (Continuous)
Staff awareness/education					
Provide education to staff about the science of climate change	Not Yet Evaluated				No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Not Yet Evaluated				No End Date (Continuous)
Provide green tips on staff website or in newsletters	Not Yet Evaluated				No End Date (Continuous)
Provide sustainability education during new staff orientation	Not Yet Evaluated				No End Date (Continuous)
Team-building					
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Not Yet Evaluated				No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress	Although the Nisga'a Valley Health Authority has not yet evaluated the creation of green, sustainable, energy conservation, or Climate	Continue to provide support and dedicated staff to support NVHA teams.	2008	No End Date (Continuous)

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Actions to Reduce Provincial Emissions and Improve Sustainability					
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Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		Action teams, the Nisga'a Valley Health Authority provides resources and dedicated staff to support teams for all NVHA initiatives.			
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress	The Nisga'a Valley Health Authority provides behaviour change education/training - professional development - to staff at all levels.	Continue to provide education/training.	2008	No End Date (Continuous)
Other Sustainability Actions					
Adaptation to Climate Change					
Assessed whether extreme weather events and/or long term changes in climate will affect the organization's business areas	Ongoing/In Progress	The emergency preparedness plan assesses the risks of weather and climate on business areas.	Increase awareness of the risks and the plan.	2008	No End Date (Continuous)
Integrated considerations of extreme weather events and/or long term changes in climate into the organization's decision making.	Not Yet Evaluated				No End Date (Continuous)
Building construction, renovation					
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	In Development	Although there is no policy in place, materials are reused as much as possible and when possible. Alternative options for disposal are also looked at.	Develop policy.	2012	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Not Yet Evaluated				No End Date (Continuous)
Commuting to and from home					
Introduce telework/work from home policy	Not Yet Evaluated				No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	In Development	The NVHA implements a variety of health programs that challenge staff to be healthier. As a result, a number of staff do walk to work.	Increase awareness.	2010	No End Date (Continuous)
Procurement (non-paper supplies)					
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	Not Yet Evaluated				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.)	Not Yet Evaluated				No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Not Yet Evaluated				No End Date (Continuous)
Waste reduction/diversion					
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress	Recycling programs are being implemented.	Increase awareness and recycling programs.	2009	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress	Electronic equipment including computers are brought to a recycling depot.	Increase awareness and recycling program.	2009	No End Date (Continuous)
Water conservation					
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress	Water fixtures are replaced with efficient models.	Continue practice of purchasing efficient models.	2008	No End Date (Continuous)
Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	Not Yet Evaluated				No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Not Yet Evaluated				No End Date (Continuous)

**Nisga'a Valley Health Authority  
Greenhouse Gas Emissions by Source  
for the 2012 Calendar Year (tCO<sub>2</sub>e\*)**



**Total Emissions: 246**

- 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 2012 (Generated May 27, 2013 11:07 AM)**

Total offsets required: **242**. Total offset investment: **\$6,050**. Emissions which do not require offsets: **5** \*\*

\*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.