



Stantec

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Thursday, December 3, 2009

Chief Administrative Officer
Peace River Regional District
Box 810
Dawson Creek, BC
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RE: Peace River Regional District Corporate Energy Plan

Dear Peace River Regional District Board Members,

The Peace River Regional District, in collaboration with the municipalities of Chetwynd, Pouce Coupe, Taylor and Tumbler Ridge retained The Sheltair Group (now Stantec) to develop both corporate and community energy plans for each community and the rural areas. Developing these plans will enable the local governments to meet their voluntary commitments under the Climate Action Charter and their regulatory commitments under the "Green Communities" amendment to the Local Government Act (Bill 27, 2007).

I am pleased to present the first portion of the project, the Peace River Regional District Corporate Energy Plan. The PRRD Corporate Energy Plan will support the Regional District in its commitment under the Climate Action Charter by:

1. Establishing a **baseline inventory** of annual GHG emissions,
2. Identifying **measures to reduce GHG emissions** as much as possible,
3. Proposing a GHG emissions reduction **target**, and
4. Outlining **implementation** considerations over the next five-years, such as resource requirements, to carry out the plan.

Please find attached a summary of the baseline inventory and plan.

Sincerely,
Cariad Garratt
Project Coordinator, The Sheltair Group (now Stantec)

Encl. Peace River Regional District – Corporate Energy Plan Summary

Dec 11 2009

Corporate Energy and GHG Emissions: 2008

In 2008, the Peace River Regional District consumed a total of **5463 GJ** of energy and emitted **221 tonnes of CO₂** equivalent GHG emissions in the delivery of its services¹. Energy consumption in buildings accounts for 42% of these GHG emissions, fleet vehicles account for 56%, and infrastructure accounts for 1%. The breakdown of GHG emissions is shown in Figure 2.

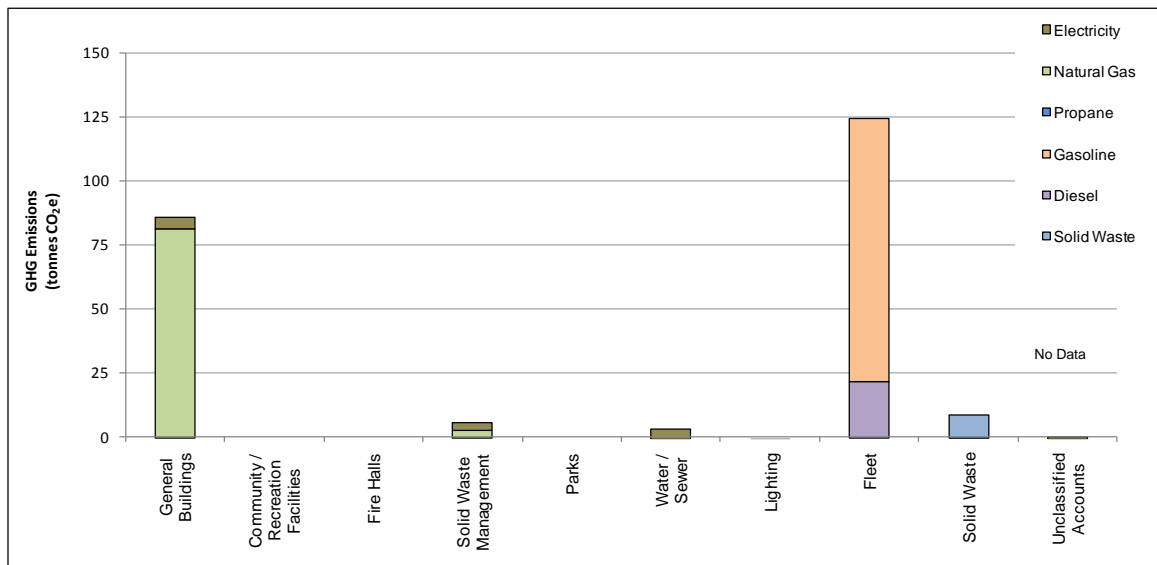


Figure 1: GHG emissions (tonnes CO₂e) from Peace River Regional District’s corporate operations

GHG Emission Reduction Target [Proposed]

The Peace River Regional District will commit to reducing corporate greenhouse gas emissions by 15% below 2008 levels by 2015.

¹ Reported GHG emissions are those applicable to the Climate Action Charter carbon neutrality commitment. Emissions resulting from solid waste decomposition are not included.

Key Actions for Meeting the Target

The recommended actions for meeting the target are summarized in Table 1. By implementing these reduction measures, it is estimated that the Peace River Regional District could reduce operational GHG emissions by approximately 15%.

Table 1. Summary of Emission Reduction Opportunities (tonnes CO₂e)

Actions	2008 GHG Emissions	Estimated Reductions
Existing Buildings: 1. Retrofit buildings for energy efficiency 2. Promote energy efficiency practices among staff 3. Include energy efficiency in building maintenance	92	25-30
New Buildings: 4. Develop an energy efficiency building policy 5. Develop an alternative energy policy for new buildings / major renovations	0 [impacts future emissions only]	30% or more [of future emissions]
Fleet: 6. Select fleet vehicles with "right-sizing" principles 7. Switch fuels or use additives to reduce emissions 8. Reduce idling 9. Train staff on energy efficient driving techniques	124	15
Infrastructure: 10. Reduce energy requirements for water and wastewater infrastructure 11. Convert exterior lighting to LED and/or solar power	3	minimal
Purchasing & Corporate Leadership: 12. Develop an energy efficiency purchasing policy 13. Provide energy efficiency incentives for funding applications 14. Identify energy champions 15. Reduce corporate travel (carpooling)	n/a	[unknown]
Regional Collaboration: 16. Participate in regional building energy performance benchmarking 17. Establish a regional energy manager position 18. Collaborate regionally on purchasing and training	n/a	[unknown]

The majority of potential savings identified are through building retrofits, including:

- Administrative office: high efficiency furnaces, sensors for lighting, weather stripping;
- Warehouse: energy efficient lighting, programmable thermostat;
- Charlie Lake fire hall: automatic flue damper, programmable thermostats;
- Bessborough landfill: energy efficient lighting, programmable thermostat, occupancy sensors; and
- North Peace Leisure Pool: several retrofits identified, though not currently included in the inventory.



Implementation

In order to meet the 5-year target of reducing corporate emissions by 15%, the Regional District will need to fund building retrofits of approximately \$100,000, some of which may be funded by external programs and agencies. Furthermore, the Regional District will need to introduce policies and programs to educate staff and increase efficiency in the operations of buildings and fleet vehicles.

