



Notice of Meeting and Meeting Agenda Environmental Services Committee

Wednesday, May 2, 2018

1:30 PM

6th Floor Boardroom
625 Fisgard St.
Victoria, BC V8W 1R7

J. Brownoff (Chair), D. Blackwell (Vice Chair), R. Atwell, B. Desjardins, C. Hamilton, L. Helps,
M. Hicks, N. Jensen, D. Murdock, J. Ranns, S. Price (Board Chair, ex-officio)

1. Approval of Agenda

2. Adoption of Minutes

- 2.1. [18-296](#) Minutes of the March 7, 2018 Environmental Services Committee Meeting

Recommendation: That the minutes of the March 7, 2018 Environmental Services Committee meeting be adopted as circulated.

Attachments: [Minutes](#)

3. Chair's Remarks

4. Presentations/Delegations

5. Committee Business

- 5.1. [18-249](#) Business Case Analysis - Renewable Natural Gas

Recommendation: That the Integrated Resource Management Advisory Committee recommends that the Environmental Services Committee recommends to the Capital Regional District Board: That staff proceed with the development of a Hartland RNG project plan, for approval and funding through the 2019 budget process, based on:

- * optimizing the sizing of the Hartland RNG project by considering the co-upgrading RNG from landfill gas, residual treatment facility biogas, and potential Hartland food waste anaerobic digestion biogas
- * initiating the procurement process for an appropriately sized RNG upgrading facility and associated infrastructure at Hartland landfill
- * a 25-year RNG purchase agreement, and associated FortisBC pipeline extension, that meets the BC Utilities Commission regulation rate of return requirements
- * funding the RNG project using available federal and provincial grants, ERM financial reserves, third party contributions and Municipal Finance Authority debt
- * working with CRD municipalities, in 2018, to confirm interest in participating in the RNG project by supplying feedstock materials, capital investment, and economic/ environmental dividend expectations

[An additional recommendation was made at the Integrated Resource Management Advisory Committee meeting as follows:]

That the Integrated Resource Management Advisory Committee recommends that the Environmental Services Committee recommends to the Capital Regional District Board: That staff continue to update the costs for the options to generate green energy.

Attachments: [Staff Report: Business Case Analysis - Renewable Natural Gas](#)
[Attachment 1: RNG Infographics](#)
[Presentation: Business Case Analysis-RNG](#)

5.2. [18-270](#) Renovation Waste Campaign Update

Recommendation: That the Environmental Services Committee recommend to the Capital Regional District Board:
That this report be received for information.

Attachments: [Staff Report: Renovation Waste Campaign Update](#)
[Appendix A: Clean Demo Brochure](#)
[Appendix B: Clean Demo Waste Advertisement Example](#)
[Appendix C: Clean Demo Campaign Metrics](#)

5.3. [18-278](#) Abandoned Boats Program Update

Recommendation: That the Environmental Services Committee recommend to the Capital Regional District Board:

That this report be received for information.

Attachments: [Staff Report: Abandoned Boats Program Update](#)

6. New Business

7. Adjournment

Next Meeting: June 6, 2018

To ensure quorum, please advise Pat Perna (pperna@crd.bc.ca) if you or your alternate CANNOT attend.

Meeting Minutes

Environmental Services Committee

Wednesday, March 7, 2018

1:30 PM

6th Floor Boardroom
625 Fisgard St.
Victoria, BC V8W 1R7

PRESENT:

Directors: J. Brownoff (Chair), D. Blackwell (Vice Chair), R. Atwell, B. Desjardins, C. Hamilton, L. Helps, M. Hicks, N. Jensen, D. Murdock, J. Ranns, S. Price (Board Chair, ex-officio)
Staff: R. Lapham, Chief Administrative Officer; L. Hutcheson, General Manager, Parks and Environmental Services; R. Smith, Senior Manager, Environmental Resource Management; E. Gorman, Deputy Corporate Officer; P. Perna, Committee Clerk (Recorder)

Regrets: Director Jensen

The meeting was called to order at 1:30 pm.

1. Approval of Agenda

**MOVED by Director Blackwell, SECONDED by Director Atwell,
That the agenda for the March 7, 2018 Environmental Services Committee
meeting be approved as circulated.
CARRIED**

2. Adoption of Minutes

- 2.1. [18-149](#) Minutes of the February 7, 2018 Environmental Services Committee Meeting

**MOVED by Director Blackwell, SECONDED by Director Desjardins,
That the minutes of the February 7, 2018 Environmental Services Committee
meeting be adopted as circulated.
CARRIED**

3. Chair's Remarks

The Chair remarked on updates on the Abandoned Boats Project, Federal Government policy options for reducing plastics in the oceans, and registration for adult only group tours of the Hartland Landfill on March 22nd and 24th.

4. Presentations/Delegations - None.

5. Committee Business

- 5.1. [18-075](#) Award of Contract 17-1938 - Hauling and Processing of Kitchen Scraps
L. Hutcheson provided an overview of the report.

Discussion ensued on the following:

- rationale for cost increases
- contractor's facilities
- in-region or near-region processing and procurement
- requirements and options in the contract

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the Environmental Services Committee recommend to the Capital Regional District Board:

1. That Contract 17-1938, Hauling and Processing Kitchen Scraps, be awarded to D.L. Bins Ltd. from March 1, 2018 to February 28, 2021, at the rate of \$143.73 per tonne and an estimated cost of \$934,245 per year.

2. That The Hartland tipping fee rate for kitchen scraps be maintained at \$120 per tonne.

CARRIED

5.2. [18-074](#)

2018 Board Standing and Select Committees - Terms of Reference
(Integrated Resource Management Advisory Committee)

L. Hutcheson provided an overview of the report and the Terms of Reference.

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the Environmental Services Committee recommend to the Capital Regional District Board:

That the Terms of Reference for the 2018 Integrated Resource Management Advisory Committee, as attached in Appendix A, be approved as amended under 1.0 Purpose to remove bullets a) and b) and add to the first sentence after "...the Board regarding", "waste to resource programs for biosolids, kitchen scraps and/or municipal solid waste including integrated resource management options."

CARRIED

6. Correspondence

6.1. **18-167**

Letter from Metro Vancouver re Commercial Waste Hauler Licensing Bylaw

L. Hutcheson provided an overview of what Metro Vancouver is looking for by way of support.

MOVED by Director Blackwell, **SECONDED** by Director Helps,
That the correspondence be received for information and referred to the Solid Waste Advisory Committee.

CARRIED

7. New Business - None.

8. Motion to Close the Meeting

8.1. [18-150](#) Motion to Close the Meeting

MOVED by Director Helps, **SECONDED** by Director Blackwell,
That the meeting be closed in accordance with the Community Charter, Part 4,
Division 3, 90(1),(a), personal information about an identifiable individual who
holds or is being considered for a position as an officer, employee or agent of the
regional district or another position appointed by the regional district.
CARRIED

The Committee moved to the closed session at 1:53 pm.

The Committee rose from the closed session at 2:06 pm without report.

9. Adjournment

MOVED by Director Blackwell, **SECONDED** by Director Hamilton,
That the March 7, 2018 Environmental Services Committee meeting be adjourned
at 2:06 pm.
CARRIED

Chair

Recorder

**REPORT TO INTEGRATED RESOURCE MANAGEMENT ADVISORY COMMITTEE
MEETING OF WEDNESDAY, APRIL 18, 2018**

SUBJECT **Business Case Analysis – Renewable Natural Gas**

ISSUE

To present the results of the business case for renewable energy infrastructure options at Hartland landfill.

BACKGROUND

The CRD Hartland Landfill was one of the first in the province to beneficially utilize landfill gas and starting in 2003 gas has been collected and used for power production generating the equivalent electricity used by 1100 homes. With current landfill gas collection volumes, the Hartland landfill power generation facility is only able to utilize 50% of the gas collected to produce electricity; the remaining gas is flared. Flaring converts methane to carbon dioxide, minimizing environmental impact but does not achieve beneficial use of the remaining gas. The original Hartland landfill gas infrastructure was sized to accommodate doubling of the power production capacity with the addition of a second power generator.

Hartland landfill gas utilization options are constrained by a lack of direct access to energy users in relatively close proximity to the Hartland site. However, existing electricity and gas utilities have access to markets and infrastructure to facilitate increased landfill gas utilization at Hartland: by increasing the generation of electricity and sale to BC Hydro (Green Power), or by upgrading of landfill gas to Renewable Natural Gas (RNG) and the sale of RNG to FortisBC.

In November 2016, the Board directed staff to work with FortisBC to investigate RNG as a landfill gas utilization alternative and develop an RNG business case outlining the economic and environmental implications of the RNG utilization alternative.

ALTERNATIVES

That the Integrated Resource Management Advisory Committee recommends to the Environmental Services Committee that:

Alternative 1

Staff proceed with the development of a Hartland RNG project plan, for approval and funding through the 2019 budget process, based on:

- optimizing the sizing of the Hartland RNG project by considering the co-upgrading of RNG from landfill gas, residual treatment facility biogas, and potential Hartland food waste anaerobic digestion biogas
- determining market interest in development of an appropriately sized RNG upgrading facility and associated infrastructure at Hartland landfill
- a 25-year RNG purchase agreement, and associated FortisBC pipeline extension, that meets the BC Utilities Commission regulation rate of return requirements

- funding the RNG project using available federal and provincial grants, Environmental Resource Management (ERM) financial reserves, third party contributions and Municipal Finance Authority debt
- working with Capital Regional District (CRD) municipalities in 2018 to confirm interest in participating in the RNG project by supplying feedstock materials, capital investment, and economic/environmental dividend expectations

Alternative 2

That staff proceed with a procurement plan to double the Green Power production capacity at the Hartland power generation facility by:

- giving BC Hydro notice of the CRD intent to expand the Hartland power purchase agreement
- procuring the required equipment to twin the existing Hartland power generation capacity

INTEGRATED RESOURCE MANAGEMENT IMPLICATION

The environmental and financial implications of the RNG project may be optimized by sizing the Hartland RNG infrastructure to allow for the co-upgrading of RNG from multiple feedstocks: landfill gas, residual treatment facility biogas, and potential Hartland food waste anaerobic digestion biogas. These co-upgrading opportunities are highlighted by the three RNG scenarios being evaluated:

- RNG low case – landfill gas
- RNG mid case – landfill gas + organics anaerobic digestion biogas
- RNG high case* – landfill gas + organics anaerobic digestion biogas + residual treatment facility biogas

* RNG high case – upgrading of biogas from Residuals Treatment Facility (RTF) to RNG represents an opportunity to increase the financial value of the biogas.

Integration opportunities relating to the Green Power alternative are not available because the twinning of the existing power capacity would be fully utilized by the landfill gas currently being captured at Hartland, leaving no capacity to process any additional biogas

ENVIRONMENTAL IMPLICATIONS

The environmental impacts of the two alternatives can best be articulated in terms of the CRD's climate change targets and strategies (i.e. the investment's ability to displace the use of fossil fuels). The production of Green Power, based on provincial carbon assumptions, results in a negligible incremental climate change benefit as it displaces electricity that is produced mainly by hydroelectric dams, a low emission source.

When captured and purified, RNG provides a locally produced, carbon neutral energy source. Injection of RNG into the FortisBC gas system displaces the use of fossil fuels and has a measurable impact on greenhouse gas emissions, 50kg per gigajoule (GJ) of displaced natural gas.

Estimated Annual Greenhouse Gas Avoided Emissions

Alternatives	Avoided Emissions
Green Power	0 tonnes/year
RNG (low case) – 200,000 GJ/yr	10,000 tonnes/year
RNG (mid case) – 250,000 GJ/yr	12,500 tonnes/year
RNG (high case)* – 325,000 GJ/yr	12,500 tonner/year

* RNG high case – upgrading of biogas from Residuals Treatment Facility to RNG represents an opportunity to increase the financial value of the biogas.

Initial conversations with the University of Victoria and Institute for Integrated Energy Systems, has resulted in significant interest in exploring the concept of a RNG research centre at Hartland that would have access to a nominal stream of landfill/biogas/RNG for innovation and beneficial use research.

ECONOMIC IMPLICATIONS

ERM activities are substantially funded by landfill tipping fees and there is no reliance on property tax requisitions as a source of funding for this regional service. The strong local economy, and resulting increase in landfill tonnage, has resulted in substantial accumulation of financial reserves within the ERM's various financial reserves, \$42.4 million as of end of 2017. The reserves are split into three main accounts; 1) \$23.4 million in the sustainability fund to stabilize tipping fees due to annual fluctuations in volume and 2) \$9.5 million in capital reserve for future capital investments 3) \$9.5 million to fund the landfill closure liability. As evaluated annually in the audit report, KPMG has identified the liability is fully funded and not expected to be needed until 2050. The total 2017 revenue from the landfill was \$18.3 million, \$4.3 million over plan due to higher quantities of controlled waste and general refuse from the local construction activities.

A substantial investment in solid waste infrastructure is one way of re-investing ERM reserve funds for the benefit of the community. In addition, recently announced federal and provincial programs have identified sectors which support renewable energy production, such as RNG, as being potentially eligible to access funding support.

Green Power and RNG upgrading infrastructure have similar levels of known technology risk, as both landfill gas utilization strategies are commercially proven with many installations worldwide. The projected financial returns of both scenarios are based on financial and technical screening information provided by our consultants and, prior to proceeding with either alternative, will have to be further refined with the development of a detailed project plan and procurement strategy. The economics of the Green Power are based on the extension of the CRD's existing power purchase agreement with BC Hydro. The economics of the RNG opportunity are based on a conservative interpretation of the BC Utilities Commission regulated rate of return and capital structure parameters for natural gas distribution projects.

Economic Implications

	Status Quo	Alternative 1	Alternative 2		
Financial Summary	Base Case	Green Power	RNG Low	RNG Mid	RNG High
ERM Cash Reserves (\$Mil)	\$42.5	\$42.5	\$42.5	\$42.5	\$42.5
Capital Investment (\$Mil)	n/a	-3.0	-23.3	-24.5	-26.2
Net ERM Cash Reserves (\$Mil)	42.5	39.5	19.2	18.0	16.3
Annual Net Impact – Year 3 (\$Mil/year)	\$0.85	\$1.09	\$1.96	\$2.04	\$2.12

INTERGOVERNMENTAL IMPLICATIONS

The methodology chosen to distribute the potential financial and environmental dividends associated with the landfill gas utilization investment has the potential to have significant positive implications for the CRD and its municipalities. Saanich and Victoria have set a 100% renewable energy target by 2050. An RNG project has strong potential to align with the municipal renewable energy targets.

CONCLUSION

The CRD's investment in landfill gas utilization infrastructure has the potential to create significant economic and environmental benefits. RNG and Green Power both provide an opportunity for strong financial returns on investment. The RNG investment provides additional potential benefits beyond that of the Hartland green power opportunity, including:

- displacement of natural gas on the FortisBC gas distribution system, resulting in avoiding up to 12,500 tonnes/year of CO₂e emissions
- leveraging ERM financial reserves to provide an additional \$700,000/year in investment returns
- additional RNG integration opportunities (kitchen scraps anaerobic digestion, residuals treatment facility biogas upgrading, University of Victoria Renewable Fuel Research)
- Supporting CRD and municipal community and corporate greenhouse gas emission reduction targets and climate action strategy goals

A high level triple bottom line summary of benefits strongly supports further development of the RNG project alternative. The preliminary financial indicators for the RNG alternatives are significantly stronger than the Green Power alternative, with incremental net revenue of approximately \$2 million/year. In addition, the RNG alternative results in substantial greenhouse gas emissions reductions of 10,000 tonnes/year CO₂e. The project also has the potential to be leveraged and used to create additional value by integrating the RNG project with the processing of biogas from the Residuals Treatment Facility and/or processing of biogas from a Hartland based kitchen scraps processing facility.

RECOMMENDATIONS

That the Integrated Resource Management Advisory Committee recommends to the Environmental Services Committee that:

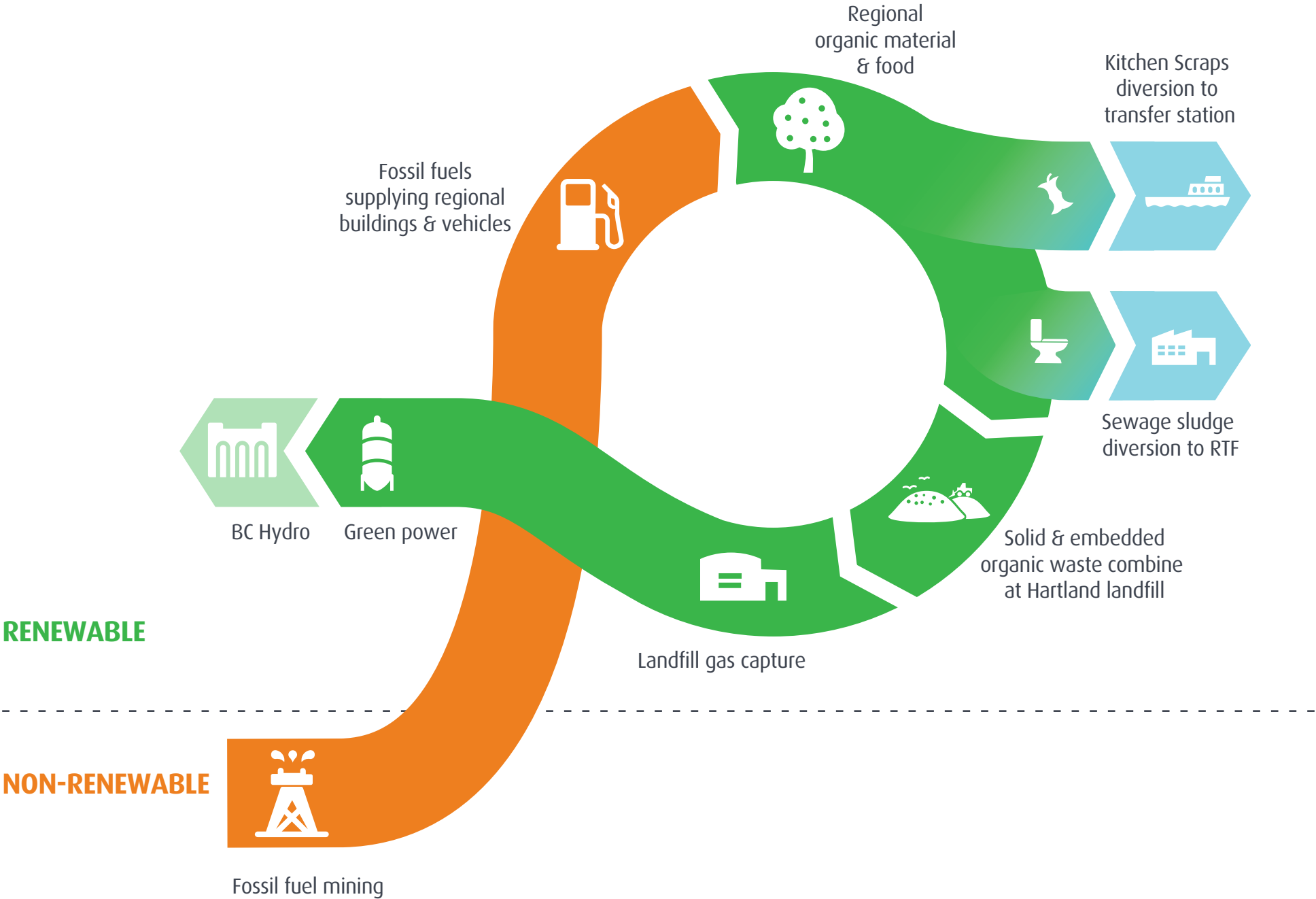
Staff proceed with the development of a Hartland RNG project plan, for approval and funding through the 2019 budget process, based on:

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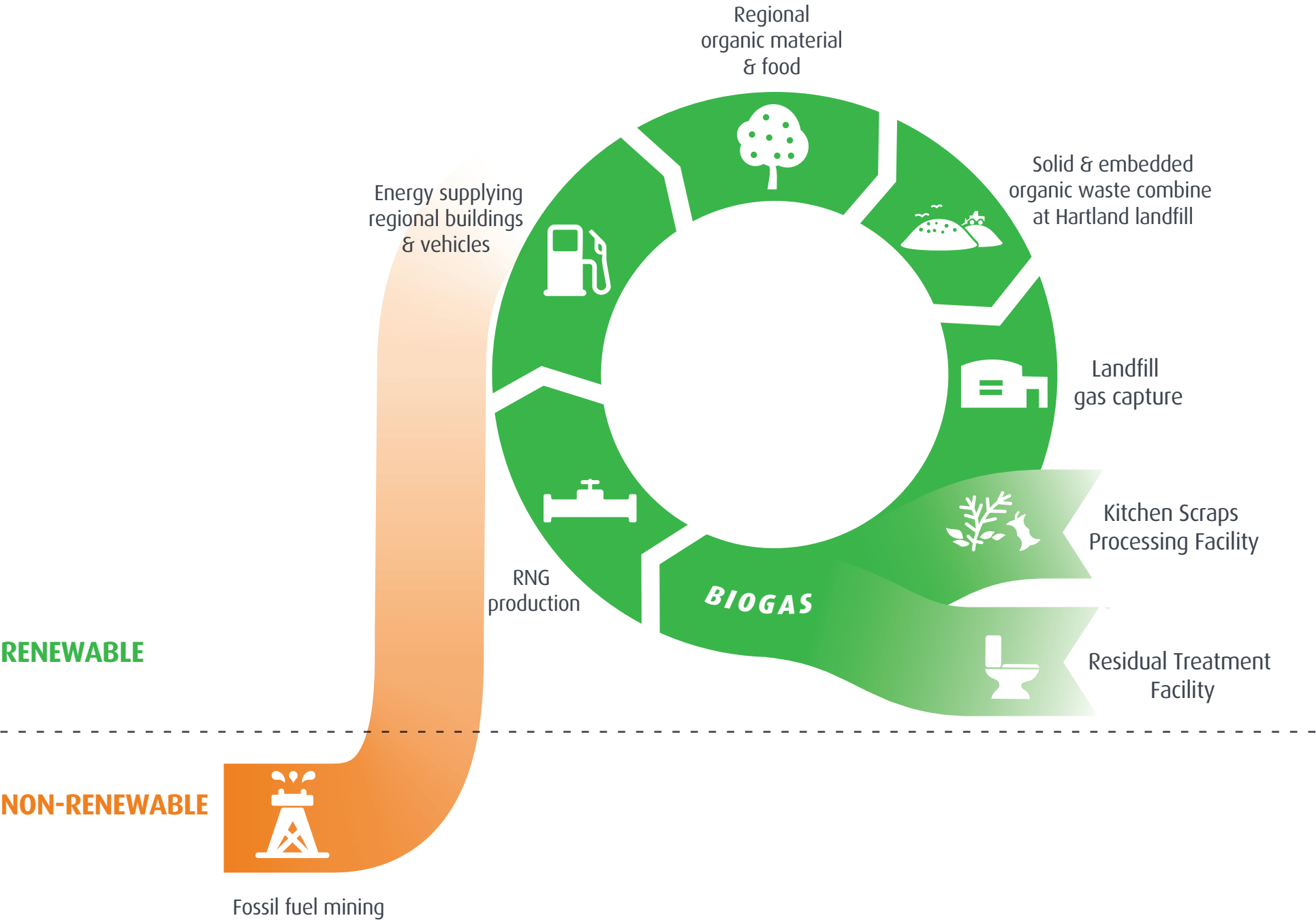
Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

RS:ac

Current Carbon Cycle



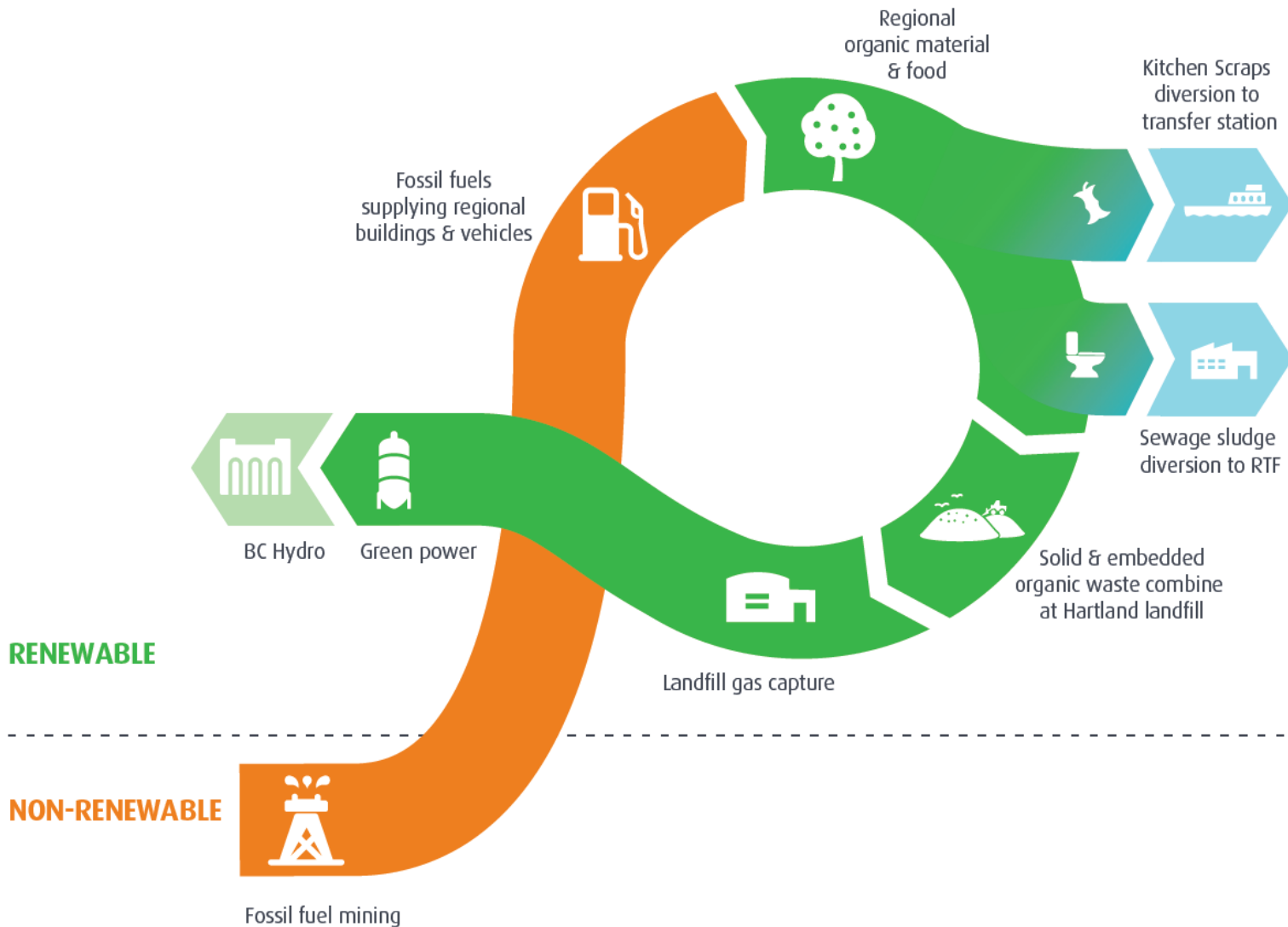
Future Carbon Cycle



- Renewable Natural Gas (RNG)
 - Upgrade Hartland landfill gas to RNG and inject into Fortis pipeline
- Green Power
 - Increase Hartland power production infrastructure and sell more Green Power to BC Hydro

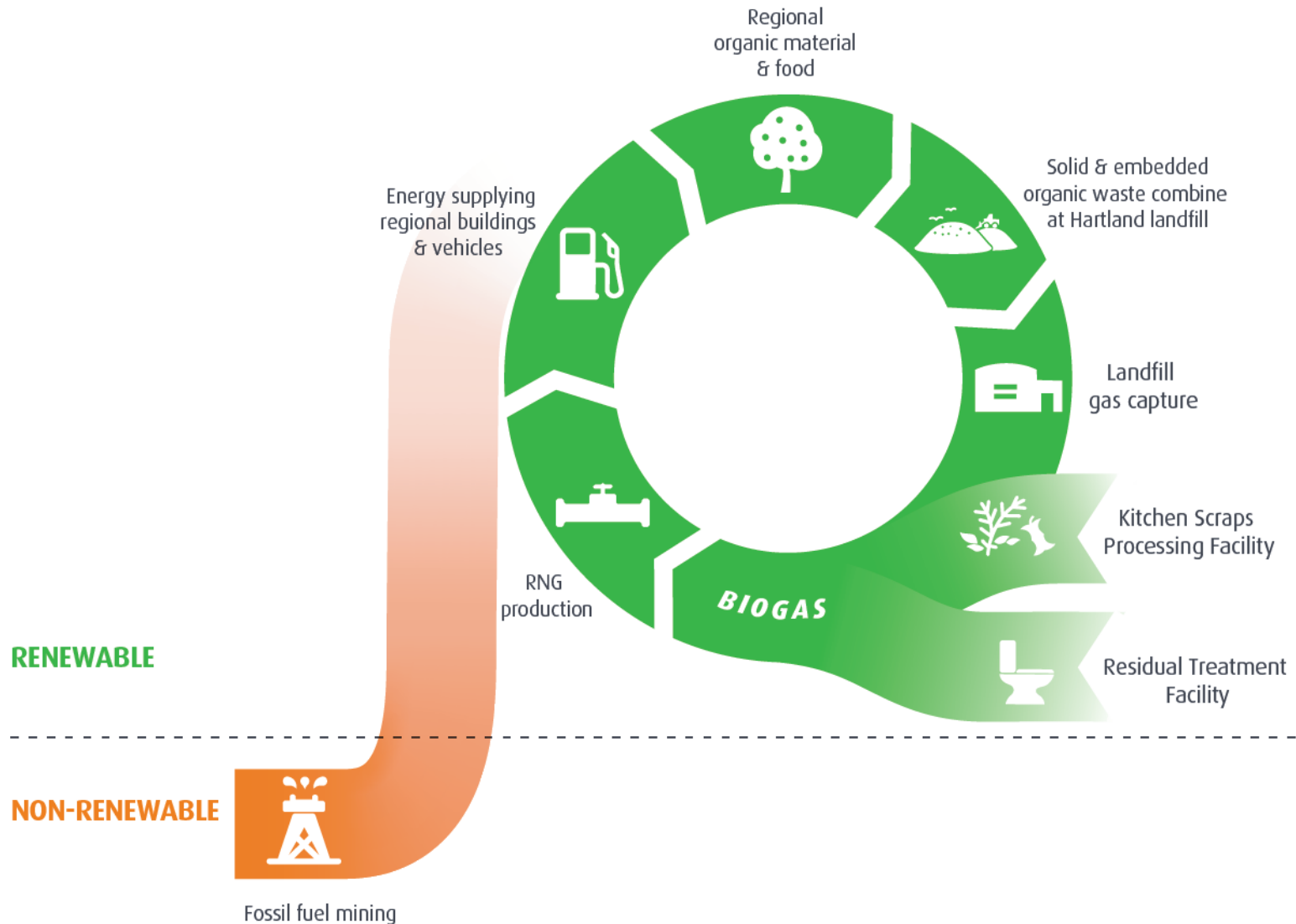
Current Carbon Cycle

CRD



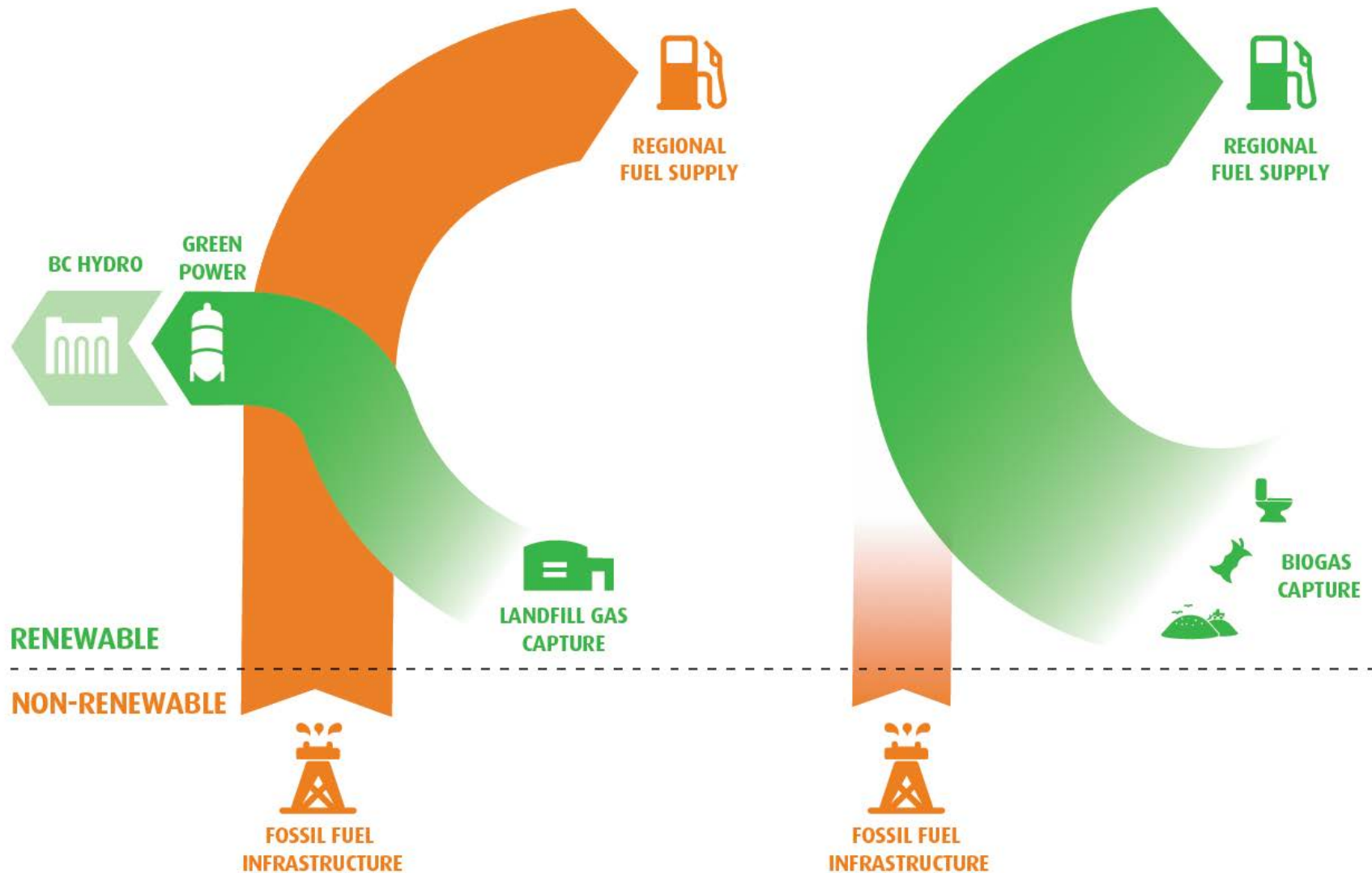
Future Carbon Cycle

CRD



Possible Fossil Fuel Displacement

CRD



Potential Integration of Biogas

CRD

ORGANIC
MATERIAL



BIOGAS CAPTURE

ORGANIC
MATERIAL

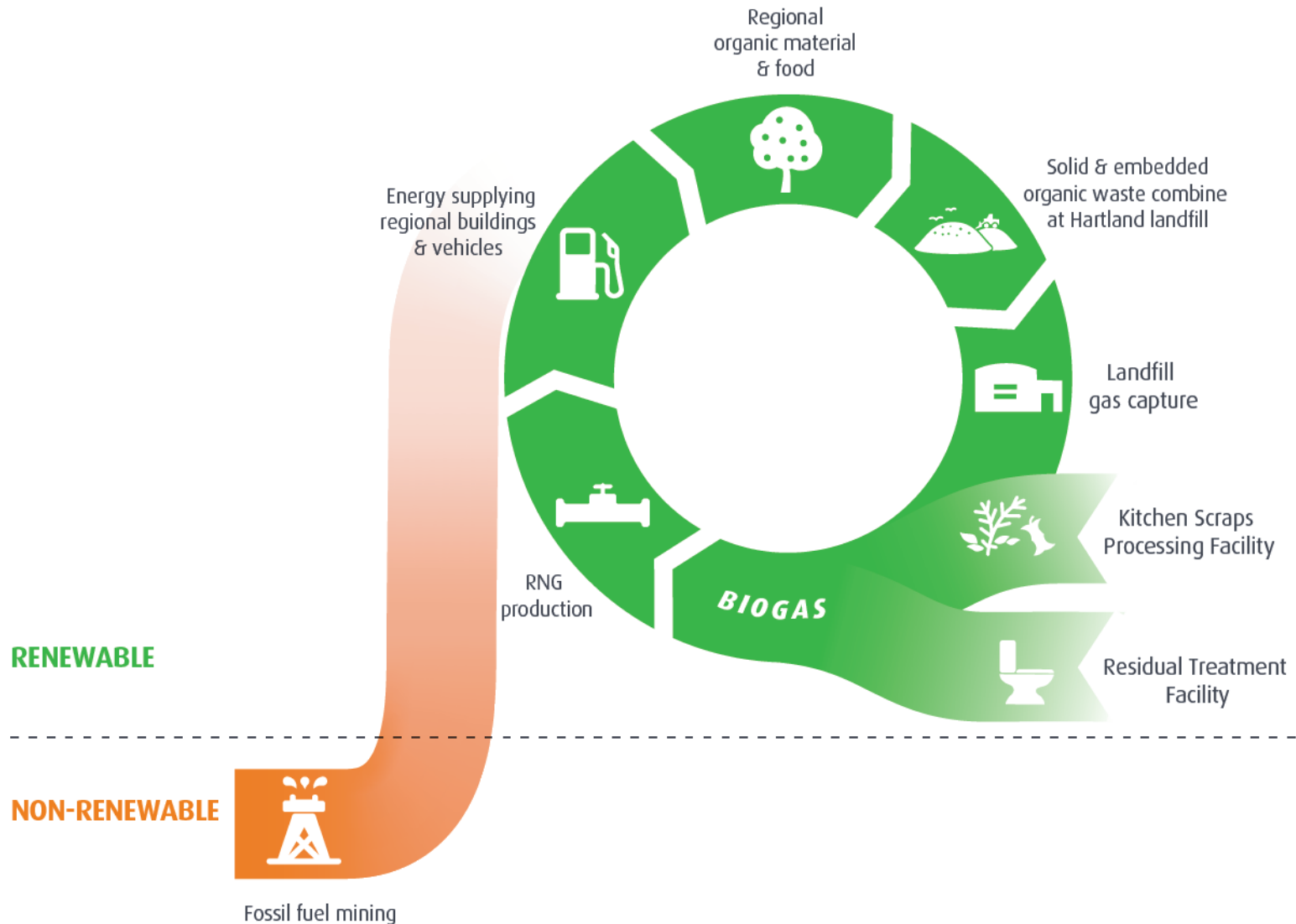


BIOGAS CAPTURE



Future Carbon Cycle

CRD



**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, MAY 2, 2018**

SUBJECT **Renovation Waste Campaign Update**

ISSUE

To update the committee regarding the Capital Regional District (CRD) Reno Safe and Waste Wise campaign supporting safe management of residential renovation waste.

BACKGROUND

Construction, renovation and demolition-related waste has increased at Hartland landfill in recent years and home renovators produce a significant portion of that waste. Many renovations are completed by homeowners who may not understand waste and safety-related risks and regulations. CRD staff have observed that many loads are improperly packaged and bring potentially hazardous renovation waste to the landfill. In doing so, they potentially expose themselves, family members, landfill visitors and staff to airborne asbestos fibers and other hazardous wastes.

WorkSafeBC regulations require safe working environments for all employees. To ensure the safety of CRD landfill employees, a new pre-approval process has been implemented prior to accepting residential renovation waste. The pre-approval process for residential users mirrors the process already in place for commercial users and involves review of data to confirm the presence/absence of hazards. The new process essentially compels the public to properly demonstrate waste quality and appropriately package and dispose of wastes.

The CRD launched a six-week pilot program and campaign in January 2018. The goal was to educate the public regarding the risks associated with hazardous wastes, with an emphasis on asbestos, and the upcoming pre-approval process. The campaign is consistent with current WorkSafeBC messaging and reminds the public about renovation waste health risks and that these risks extend beyond their immediate family to renovation workers and landfill staff.

The message has been delivered through outreach events and new educational tools. Through the campaign, staff prepared web content and other educational tools such as brochures (Appendix A) and print and digital advertising (Appendix B). Staff shared information with municipal planning departments, Hartland landfill, visitors and staff, private waste disposal centres and at numerous outreach events. Campaign costs were approximately \$30,000, including planning, graphic design and advertising. During the six-week campaign, staff engaged over 2,000 members of the public. The attached table (Appendix C) reports metrics for the main campaign tools.

CONCLUSIONS

In early 2018, the campaign and pilot study successfully educated over 2,000 members of the public regarding safe management of renovation wastes. The message and campaign materials will continue to be shared with the public during various CRD outreach events (e.g., home shows). Hartland's new pre-approval process commenced on March 31, 2018 and improved evaluation of renovation waste quality will continue to support safe working environments for all employees.

RECOMMENDATION

That the Environmental Services Committee recommend to the Capital Regional District Board:

That this report be received for information.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

KKT:cam/ss

Attachments: Appendix A – CRD Clean Demo Brochure
Appendix B – CRD Clean Demo Waste Advertisement Example
Appendix C – CRD Clean Demo Campaign Metrics

Reno Safe and Waste Wise

CRD | Environmental Protection



Check for asbestos and other hazards **before** you start your renovation



What is asbestos?

Asbestos is a mineral fibre. Asbestos fibres resist fire, heat and electricity, and for that reason, asbestos was used in thousands of building products up to 1990. When left in place, there is little risk associated with these products. However, disturbed materials that contain asbestos can lead to inhalation of asbestos fibers, which may lead to lung scarring or cancer.

Learn more at www.thinkasbestos.com

Common asbestos containing materials include:

- Vinyl sheet flooring/vinyl floor tile
- Drywall joint compound
- Plaster
- Ceiling tile
- Stucco
- Textured ceiling coat
- Furnace, central heating tapping, wrap and gaskets
- Cement panels (transite)
- Cement board

Resources

Where can I find qualified help?

Companies that conduct HazMat surveys, asbestos testing, and asbestos removal can be found online by searching 'Asbestos Abatement and Removal', 'Health and Safety Consultants' or 'Asbestos Testing' at: www.crd.bc.ca/reno-waste

Transporting your reno waste

Properly packaged asbestos can be transported by a homeowner or licensed transporter. For more information on transportation of asbestos see: www.crd.bc.ca/acm

Clean reno waste

Disposal sites will require proof that reno waste is free of hazards in order to protect their workers as required by WorkSafeBC. Clean reno waste can be transported by a resident, contractor or commercial hauler.

More Resources

www.myrecyclopedia.ca

www.crd.bc.ca/reno-waste

www.crd.bc.ca/acm

www.thinkasbestos.com

www.hiddenkiller.ca

CRD Information Line: 250.360.3030



Making a difference...together

Capital Regional District
Environmental Protection
625 Fisgard Street
Victoria, BC V8W 1R7



3 Steps to

RENO SAFE + WASTE WISE

1

PLAN AHEAD & PROTECT YOURSELF

Home renovators and contractors need to take precautions when disturbing or handling hazardous materials such as asbestos.

To protect you and your family, hire a qualified professional to identify hazardous materials (asbestos or other hazards) **before** you renovate. Qualified abatement companies can safely remove and properly dispose of hazardous materials from your home and reduce your risk of exposure. If you hire a contractor for your renovation it is your responsibility to have the hazards identified and safely removed.

Hazardous materials are identified through a HazMat survey.



2

LEARN HOW TO DISPOSE OF YOUR WASTE

Renovation and demolition (reno) waste is not suitable for curbside garbage pickup. There are many drop-off locations for reno waste, such as the Hartland Landfill.

Visit www.crd.bc.ca/reno-waste for more information on landfill bans, reuse/recycling options and special handling requirements.

- **Drywall:** Hartland does not accept asbestos-free drywall because it should be recycled. Companies that accept asbestos-free drywall for recycling are listed in www.myrecyclopedia.ca. To accept asbestos-containing drywall at Hartland, testing data is required to prove it contains asbestos.
- **Asbestos:** Hartland accepts properly packaged asbestos for disposal by appointment only. Check out www.crd.bc.ca/acm for more information. Asbestos waste from your home must be doubled bagged in approved UN-rated 6 mil poly asbestos bags, which can be purchased from safety supply stores.
- **Clean reno waste** is accepted at Hartland and private facilities. Each disposal facility will have testing and acceptance requirements for this waste.



3

GET PRE-APPROVED FOR DISPOSAL

Reno waste that does not contain asbestos (except asbestos-free drywall), or other hazardous materials, can be disposed of at Hartland Landfill with pre-approval. To get pre-approved, be prepared to submit a copy of your HazMat survey or test results to email: controlledwaste@crd.bc.ca.

It may take up to 7 days for processing.

Learn more about the requirements, regulations and material bans at www.crd.bc.ca/reno-waste.

To get pre-approved:

- ☐ Get your HazMat survey or lab testing results
- ☐ Complete a clean demo application
- ☐ Submit the application and HazMat/test results
- ☐ Get your pre-approval number
- ☐ Make appointment by calling **250-360-3410** 24 hours in advance

APPENDIX B

RENO SAFE + WASTE WISE

Check for asbestos and other hazards
before you start renovating

Before you swing a hammer, hire a qualified professional to test for asbestos and remove it safely.

Learn how to properly dispose of your reno waste to avoid being turned away at Hartland Landfill or private facilities.

Find step-by-step guides, checklists and more
at www.crd.bc.ca/renowaste or contact the CRD
at 250.360.3030.



CRD

CRD Reno Safe and Waste Wise Campaign Metrics

Event / Activity	Estimated number of individuals engaged (approximate)
Home Renovation Vendors (14 events)	1,400
Municipal and Industry Solid Waste Liaison Group Joint Meeting	18
Hartland Open House for small waste haulers	20
Hartland site - education staffing (3 days/week = ~20 events)	400
Victoria Home Expo 2018	700
Canadian Home Builders Association Regional Education Program	60
Campaign page visits (from start of campaign to March 2, 2018)	2,265
Positive media hits	8
Facebook reach	6,350
Twitter reach	2,400

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, May 2, 2018**

SUBJECT **Abandoned Boats Program Update**

ISSUE

To provide an update on progress on the regional Abandoned Boats Program.

BACKGROUND

In July 2017, the Capital Regional District (CRD) Board directed staff to submit a regional application for the federal Abandoned Boats Program (ABP) for Education & Awareness (E&A) funding and Assessment & Removal (A&R) funding. CRD staff submitted an application for E&A funding on September 30, 2017, as well as applications for Assessment funding for abandoned boats in Tsehum Harbour (\$10,400) and to assess boats in Sooke Harbour (\$16,900). Once the assessments are completed, applications will be submitted for funding to remove all assessed abandoned boats.

On March 20, 2018, Transport Canada announced that the CRD had obtained the funding for a \$66,700 public outreach campaign (E&A) and \$10,400 funding to assess the boats in Tsehum Harbour (A&R).

Staff will utilize the existing controlled waste permit process to manage the boating-related marine debris and abandoned boats. Staff presented the controlled waste process and its application to future boat and boating-related marine debris disposal at the inter-municipal Abandoned Boats working group on March 20, 2018. The process ensures that the CRD meets WorkSafeBC legislated requirements to protect all workers (including those removing the boats) and the environment. Hazardous materials, as defined by the BC Hazardous Waste Regulation, cannot be accepted at Hartland landfill.

In April 2018, Transport Canada announced slight changes to the funding program; applications for Assessment or Removal funding will be accepted on a continuous basis, rather than having hard deadlines for all applications. This change should significantly improve the turn-around in funding applications and allow boat removal to occur soon after the assessments are completed.

ENVIRONMENTAL, LEGAL AND SAFETY IMPLICATIONS

Removing abandoned boats and associated debris will reduce environmental risks and improve habitat in the marine environment. The disposal of this material then needs to be managed in a safe manner to protect workers and the general public. New provincial regulations require that these materials be evaluated for hazardous materials prior to disposal.

Waste acceptance protocols at Hartland are governed by, and developed to meet requirements of the following pieces of legislation:

- WorkSafeBC Occupational Health & Safety Regulation
- BC Hazardous Waste Regulation
- Hartland Landfill Operational Certificate
- Hartland Tipping Fee and Regulation Bylaw (controlled wastes and recyclable material)

Hazardous materials in boats or marine debris can include asbestos-containing materials, creosote preserved wood, leachable lead, tributyltin and other products or chemicals.

The use of the controlled waste permit process will ensure proper assessment and documentation of materials received for disposal. Staff are working with local governments and other stakeholders to clarify the process, identify qualified persons to assess hazardous materials and ensure proper documentation when the materials arrive at the landfill.

FINANCIAL IMPLICATIONS

Under the ABP program, there is a separate application process for both the Assessment funding and the Removal funding. The CRD applied for and received \$10,900 in funding for assessment of the boats in Tsehum Harbour. This covers 100% of costs associated with conducting a detailed assessment of each boat, including all pre-testing expenses, dive expenses, and staff expenses. This approach minimizes the costs of this program to the regional taxpayer, ensures that any potential environmental or human health hazards are known prior to any of the boat material being disturbed, and assists in the determination of how each component of the boat should be recycled or disposed of. Obtaining funding through the Assessment funding program is an option available to any private or non-profit group to offset costs associated with the new pre-testing requirements for boat waste disposal at Hartland.

The process requires evaluation of any hazardous materials in the assessment. Staff expect hazardous materials to be a very small component of the overall material volume. Any pre-disposal analysis costs, along with any additional disposal costs to take material to alternate facilities, can be covered in the federal ABP disposal grant applications.

The CRD also received \$50,000 from the ABP Education fund, with the CRD contributing an additional \$16,667, for an outreach program to educate the region about responsibilities and opportunities with the ABP program.

INTER-JURISDICTIONAL IMPLICATIONS

CRD staff have reached out to all municipalities, the Islands Trust and First Nations, in addition to non-governmental organizations, to coordinate efforts on abandoned vessel inventories and ABP funding applications.

City of Victoria staff have been engaged in a process to remove the remaining vessels in the Gorge Waterway, including a court injunction. In March 2018, the court injunction was upheld and the boaters are required to remove their boats from the Gorge Waterway by May 30, 2018. Victoria and CRD staff are in discussion to determine if any remaining abandoned boats would be included in the CRD process to obtain federal funds.

Oak Bay staff informed the CRD that they are continuing to work with a non-profit organization and the Royal Victoria Yacht Club to remove abandoned boats in Cadboro Bay.

Islands Trust is also working with a non-profit organization The Dead Boat Society to complete vessel inventories on Salt Spring Island (Walkers Hook, Burgoyne Bay, Fulford Harbour, Long Harbour and Ganges Harbour). They have identified 21 wrecked or sunk boats for removal.

SOCIAL IMPLICATIONS

Staff are now working to implement the Capital Region Abandoned Boats Stewardship public outreach campaign, which will launch this summer. This campaign will deliver an extensive outreach program to increase awareness and educate boat owners, First Nations communities, local governments and the public about abandoned boat issues, and the responsibilities of boat owners, communities and government agencies in addressing these end-of-life boat issues.

The Capital Region Abandoned Boats Stewardship initiative will include the creation and delivery of print material (brochures, rack cards, posters, pull-up banners), radio and print advertisements in several local media outlets, a video, an extensive social media campaign and on-line program, and direct public engagement and education opportunities at community events. Workshops for Local Government staff and First Nations communities will also be held.

CONCLUSIONS

Abandoned vessels present an environmental risk to the region's shorelines and nearshore waters. These vessels also degrade the aesthetic enjoyment of these areas and present a safety risk to the public. Due to potential for hazardous wastes, derelict boats and other boating-related marine debris must be managed through the CRD's controlled waste permit process. Under this process, pre-testing of some materials will be required prior to disposal to ensure compliance with applicable regulations.

Funding provided by Transport Canada to the CRD will provide 100% of all assessment costs (including pre-testing requirements) and will enable the CRD to deliver an extensive public awareness and education campaign for abandoned boats in the region.

RECOMMENDATION

That the Environmental Services Committee recommend to the Capital Regional District Board:

That this report be received for information.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

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