



Governance & Services Committee

TO: Governance and Services Committee

FROM: David Komaïke
Director of Engineering Services

DATE: February 3, 2020

SUBJECT: Okanagan Biomass Waste Inventory Partnership

Purpose: To present a partnership opportunity with Okanagan Sustainability Leadership Council to complete a Biomass Waste Inventory for the Okanagan in support of the Solid Waste Management Plan.

Executive Summary:

The Okanagan Sustainability Leadership Council (OSLC) is a not-for-profit group based in Kelowna, BC with a mission to improve the sustainability of communities and industry in the Okanagan. Their mission is threefold:

- To be a network, a catalyst and a culture dedicated to making the Okanagan Valley a resilient, sustainable, regenerative and joyous place to live, work and play.
- To be a source of inspiration and thought leadership for initiatives, policies and organizations that galvanize our diverse resources in support of sustainable outcomes.
- To attract and retain people of various talents and expertise, with mechanisms that enable us to share ideas, engage citizenry, and measure our success.

The OSLC is looking partner with the Regional District to develop a Biomass Waste Inventory for the Okanagan region. Their initiative is to develop programs and initiate projects throughout the Valley that can utilize the organic and inorganic waste currently being burned or buried in our landfills and turn it into commercially viable products.

Under the Solid Waste Management Plan, the RDCO is committed to continuing existing recovery initiatives and ensuring safe disposal of residual wastes. As part of the work plan for 2020, the department is planning of completing a waste composition study to determine the characteristics of the materials being disposed. There is considerable overlap between the Biomass Inventory and the Waste Composition Studies, and a partnership with the OSLC would prove advantageous to both parties.

Together, the RDCO and OSLC hope to leverage available funding with from the Organics Infrastructure Program. The new program combines \$10 million in federal funding from the Low Carbon Economy Leadership Fund, \$10 million from the Province and \$10 million in matching funds from local government applicants and their partners.

RECOMMENDATION:

THAT the Governance and Services Committee recommend the Regional Board approve the Regional District partnering with the Okanagan Sustainability Leadership Council to complete a Biomass Inventory/Waste Composition/Organics Study;

AND FURTHER THAT that the Regional District submit an application for funding under the Organics Infrastructure Program to assist with the completion of the Biomass Inventory/Waste Composition/Organics study.

Respectfully Submitted:



David Komaika
Director of Engineering Services

Approved for Committee's Consideration



Brian Reardon, CAO

Background:

The Okanagan Sustainability Leadership Council (OSLC) is a not-for-profit group based in Kelowna, BC with a mission to improve the sustainability of communities and industry in the Okanagan. The OSLC is looking for a qualified Proponent to develop a Biomass Waste Inventory for the Okanagan region.

The Okanagan region generates significant quantities of biomass resources owing to existing and growing agricultural, food and beverage, and forestry industries, and with a rapidly growing population, the amount of construction/demolition residues and municipal solid and liquid wastes is also increasing. One of the key projects identified by the OSLC is to improve the management of biomass wastes in the Okanagan region. The overall project goal is to encourage practices that avoid traditional land-intensive waste management, reduce greenhouse gas emissions, and utilize biomass wastes for the generation of carbon-neutral energy and other bioproducts.

To date, no known comprehensive study has been commissioned to identify the sources, composition, quantity, and current waste management practices of biomass wastes in the Okanagan region.

The major biomass wastes in the Okanagan are assumed to include the following:

- Organic municipal waste;
- Wastewater and wastewater solids;
- Hog fuel, shavings, and chips from sawmills;
- Forestry in-field residuals;
- Winery and vineyard solid and liquid wastes;
- Orchard waste;
- Agricultural and livestock wastes;
- Food and beverage industry wastes; and
- Construction and demolition debris.

The Regional District, through the Solid Waste Management Plan, is responsible for the development and implementation of strategies to manage solid waste from all sources within the Central Okanagan. A significant volume of waste from the Industrial, Commercial and Institutional sectors is currently landfilled as no other viable alternative exists. The Waste Reduction Office 2020 Work Plan includes a Waste Composition Study. In addition, the RDCO is committed to re-evaluate organic waste diversion opportunities related to landfill gas generation.

Partnering with the OSLC on a larger study which considers the entire waste stream would provide invaluable information for use by the Regional District, our municipal partners, the waste sector and educational institutions. The partnership will allow the OSLC and the RDCO to leverage available funds with possible grants to provide a comprehensive review of the solid waste stream.

The Solid Waste Management Plan stresses:

- the importance of developing collaborative partnerships with interested parties to achieve regional targets set in the plans;
- the importance of re-evaluating organic waste diversion opportunities while considering the need to maintain landfill gas collection and use at the landfill; and
- the need to investigate opportunities to process and recycle C&D materials and to recover energy from C&D.

The proposed partnership with the OSLC should advance the Regional District planning in these three important areas.

Financial Considerations:

The Draft 2020 Solid Waste Operations Budget includes \$65,000 allocated towards the completion of the Waste Composition Study. This, combined with the OSLC contribution, would create an \$80,000 budget before any grant applications.

Alternative Recommendation:

That the report on the Okanagan Biomass Waste Inventory Partnership be received for information.