



## Capital Regional District

### Initial Assessment, Responses to RFEOI No. 16-1894

### Advanced Integrated Resource Management (IRM)

#### 1. Introduction

The Capital Regional District (CRD) issued RFEOI No. 16-1894 as a part of the CRD's exploration of waste management options. Specifically, the CRD desires to better understand the current market capabilities for an integrated waste management solution to manage residues from the Region's existing solid and future liquid waste management facilities. To explore market capabilities, the CRD determined that it would engage the market through an RFEOI and potentially through a subsequent procurement process.

Further the CRD wishes to explore the possibility of integrating solid and liquid waste management interests and maximize resource recovery through integrated processing of some or all of these materials and generate energy/revenue. Completion of the IRM RFEOI process is a critical step in the development of a more definitive IRM plan

#### 2. Overview of RFEOI No. 16-1894

The RFEOI identified that the CRD is seeking a solution or solutions to manage some or all of the following materials:

1. 35,000 tonnes per year of biosolids;
2. 120,000 to 135,000 tonnes per year of general municipal refuse;
3. 8,000 to 12,500 tonnes per year of controlled waste (including screenings and sludge from existing wastewater plants);
4. 15,000 to 20,000 tonnes per year of source separated household organics (kitchen scraps and compostable paper, not including yard and garden wastes); and,
5. 15,000 to 18,000 tonnes per year of yard and garden wastes.

The potential outcome of the RFEOI process could include undertaking a pilot project or directly proceeding to development of a full-scale IRM facility capable at minimum of providing a beneficial reuse solution for the material streams as identified above. The RFEOI clearly indicated CRD is interested in identifying integrated options that present region-wide and/or sub-regional solutions.

Information requested in the RFEOI included:

1. General corporate information;
2. A technical overview of the processing technology;
3. Information regarding reference facilities;
4. Information regarding preferred contract terms, contract structure and allocation of responsibilities; and,
5. Information regarding the need for and interest in undertaking a pilot.

### **3. Review of RFEOI Responses**

The RFEOI was issued on February 16, 2017 and closed on March 20<sup>th</sup>, 2017. Ten submissions were received. The initial review and assessment of these submissions indicates that:

1. Overall there was a good response to the RFEOI. A reasonable number of submissions were made. Submissions were generally complete and addressed the specific information that was requested.
2. The majority of the respondents are represented in Canada and/or have team members in Canada. This should be helpful during future procurement stages.
3. The majority of respondents proposed approaches capable of integrated resource management including most if not all of the identified CRD solid and liquid waste streams.
4. All of the respondents indicated that their technology was capable of managing the biosolids stream identified in the RFEOI although in some cases there was a lack of clarity as to how exactly it would be managed. In some cases the submissions indicated that they could manage biosolids or sewage sludge.
5. The diverse feedstock sources tend to attract different treatment technologies. Respondents generally focused on organic processes (aerobic/anaerobic) to process organic wastes (biosolids, food waste, yard/garden wastes, the organic fraction recovered from mixed solid waste) and mechanical/thermal processes (RDF, gasification) for mixed waste sources.
6. Reference projects of singular technologies tended to be relevant in terms of similar feedstock, while reference projects from multi-technology proposals tended to reflect only individual components and not the combined systems, as proposed.
7. The majority of respondents prefer that the CRD provide the site for the IRM facility. Many prefer that the CRD owns the IRM facility.
8. The type of business offerings in the submissions were quite varied. Many respondents are open to a variety of development models (DB, DBOM, DBOOT, etc.).
9. The majority of respondents reported their technology as being proven (operating at a commercial level) and do not recommend that the CRD undertake a pilot project. Those

respondents that did not put forward a proven technology, were more interested in, or recommended that the CRD undertake a pilot.

A detailed evaluation of the RFEOI submissions is currently underway, and will be used to support the detailed assessment of IRM options.