SAEWA Feasibility Study Awarded over $173,000 from Green Municipal Fund

June 26, 2017

The Southern Alberta Energy from Waste Association (SAEWA) in partnership with the Town of Coaldale has been awarded $173,250 by the Federation of Canadian Municipalities' (FCM) Green Municipal Fund (GMF). The announcement was made on June 23, 2017 by federal Minister of Environment and Climate Change, the Hon. Catherine McKenna and Clark Sommerville, Past President, FCM and will allow SAEWA to evaluate potential locations for an energy-from-waste (EFW) facility in southern Alberta and have municipalities from Banff to Hanna to Vulcan County to reduce their solid waste greenhouse gas (GHG) emissions.

"Since its inception, SAEWA has been working to develop a viable EFW facility in southern Alberta as a means to reduce municipalities' solid waste management and (GHG) emissions challenges," said Ben Armstrong, SAEWA Chair and Deputy Reeve of Wheatland County. "Municipalities across southern Alberta currently ship their solid waste across the province on a crisscrossing network over thousands of kilometers every day-for example, Banff and Canmore alone currently ship their municipal waste daily more than 400 kilometers to landfills near Camrose." "Optimal siting for the EFW facility will depend on a number of factors including transportation so we can ensure that the project reduces GHG emissions across every facet of its operations."

Given the large geographical area covered by the SAEWA membership and the wide distribution of waste generation, the transportation of waste will have a substantial influence on the feasibility of an EFW facility. As part of the site selection process, a detailed and comprehensive material transport analysis will be performed to assist with establishing an efficient logistics plan for the overall system. "The grant from the Green Municipal Fund demonstrates both the federal government's and the Federation of Canadian Municipalities' commitment to exploring innovative approaches to real world challenges as well as their belief in the feasibility of an EFW project in southern Alberta," notes Paul Ryan, Vice Chair of SAEWA and councillor for the MD of Bighorn. "Reducing the overall transportation footprint for municipal waste is a key component of our project along with converting that waste into a low-carbon feedstock to generate power both of which will help Alberta meet its objectives under the provincial government's climate leadership plan"

Key Site Feasibility and Transportation Evaluation Project Components:

- Provide estimates of the environmental benefits of the facility in terms of reductions to Greenhouse Gas (GHG) and Criteria Air Containments (CAC). Lower emissions of reduced truck vehicle miles traveled causal to the preferred geographical site chosen on the basis of minimizing haul distances from various municipalities.
- Geospatial data collection and geospatial analysis to inform a shortlist of candidate sites.
- Create and populate an evaluation framework for site selection based upon a sustainable return on investment approach including factors such as: minimization of transportation distance and cost, proximity to rail network, ease of transmission grid interconnection, and other environmental considerations.
- Confirm waste quantities, composition and location of potential feedstock.
- Perform high level benefit cost analysis of front-end processing of recyclable, metals, and organics waste streams.
- Develop a repeatable "plug and play" based logistics model that can be used throughout the duration of the project as changing conditions warrant. The tool will allow scenarios to be run assuming various origin and destination pairs of waste streams commitments. The methodology will be fully documented allowing replication for other siting applications.
- Determine the proximity of a potential customer base for the sale of renewable energy. This potential customer base could be either existing energy users or the facility could be utilized as an anchor to attract future industrial and commercial local economic development.
- Short list potential candidate sites.

About SAEWA

The Southern Alberta Energy From Waste Association (SAEWA) is a non-profit coalition of municipal entities and waste management jurisdictions in southern Alberta committed to the research and implementation of energy recovery from non-recyclable waste materials that will reduce long-term reliance on landfills. Established in 2009, SAEWA is seeking to foster sustainable waste management practices that contribute to our society's overall resource efficiency and environmental responsibility. SAEWA is in the final planning stages to develop an energy-from-waste facility that will handle the conversion of municipal and other sources of solid waste into energy.

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