



## MEMO BRIEF UPDATE – March 28, 2022

**ANNOUNCEMENT** – **SAEWA** is pleased to report having received formal notification from the Hon. Ric Mclver, Minister of Municipal Affairs that SAEWA has successfully been AWARDED \$149,164 through the Alberta Community Partnership (ACP) Intermunicipal Collaboration Fund to complete the Regional Green Economy Attraction and Energy from Waste Investment Partnership Project in moving forward the Review of (3) EfW Investor Consortia - Expressions of Interest to move forward the development of the 300,000 tonne EfW Facility at the selected [Newell County Landfill site](#).

SAEWA Chair, Tom Grant

SAEWA, Vice Chair / Project Lead, Paul Ryan

Please direct inquiries to:

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## **PROJECT DEVELOPMENT BACKGROUND –**

### **Expression of Interest to partner with SAEWA –**

- SAEWA as a result of the Request for Expressions of Interest (EOI) process have received 3 Expressions of Interest from consortia (listed in no particular order):

1. Covanta – EQT Infrastructure
2. Hitachi Zosen Inova - ACCIONA
3. SUEZ - VEOLIA

### **2022 Priorities Roadmap - What members and stakeholders can expect next?**

- SAEWA has assembled the EOI Review Steering Committee that in the upcoming weeks will be coordinating a formal EOI Review Workshop to move forward on a rigorous review of the EOI submissions and qualification process.
- The 2022 ambitious timeline includes SAEWA to begin working towards holding consortia meetings with potential investors and to develop a preferred shortlist in selection of a Tech Vendor to develop the Energy-from-Waste Facility at the Newell County Landfill site.

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*The SAEWA Mission Statement: Research and implementation of energy recovery from NON-RECYCLABLE WASTE MATERIALS to reduce long term reliance on landfills.*

**Membership:** Fifty plus communities consisting of Hamlets, Villages, small Urban and Rural Municipalities, and waste authorities

**Processing Capacity:** Up to 300,000 tonnes per year

**Potential Outputs:** +/- 50 MW electricity +/- 1m tonnes process steam

**Estimated tipping fees:** \$50 per tonne with higher level (non granted) government support. \$90 per tonne with debt financing.

**Green House Gas Reductions (peer reviewed):** 230k tonnes per year, 7m tonnes over 30 year lifespan of the facility

**Engineers of Record:** HDR Inc.

**Collaborative Funds expended to complete the level of progress achieved:**

Higher level of Government(s) grant funding awarded in the amount of \$1.5m (Federal and Provincial)

Municipal support estimated \$2.0m (membership proceeds and director representation)

**Engineering Work Completed: (FCM & ACP Funding Programs \$1.5m)**

- Project Development Plan
- Regulatory Requirements Plan
- Siting Process Plan
- Communications Plan
- Procurement Process Plan
- Initial Business Plan
- Detailed Business Plan
- Governance Model established by Brownlee LLP
- Waste Stream Characterization
- Transportation Study and Siting Analysis (U of A)
- Environmental Life Cycle Analysis: HDR with 3rd Party Review by O&G Sustainability and Pembina Institute confirming reduction of 7 million tonnes GHG's and methane over facility lifecycle (35 years)

**Work Completed February 2020: (ACP \$400,000)**

- Site Study Evaluation Analysis completed by HDR and
- Site Announcement: Newell Regional Waste Landfill Site
- Extensive Provincial Government Engagement process completed

**Work Completed Summer – Winter 2020 (CARES \$48,000)**

- EfW Economic & Environmental Outreach Analysis roll-up

# SAEWA EFW Economic Summary

## Socio-Economic Impact of a Proposed Energy-from-Waste Facility in Newell County

### A Better Waste Management Alternative

- The proposed Energy-from-Waste facility to be located in Newell County, is planned to process a maximum of 300,000 metric tonnes of municipal solid waste per year from various SAEWA member municipalities and other waste generators across southern Alberta.
- The primary purpose of the facility is to divert waste streams from landfill sites resulting in GHG emission reductions estimated at 7 million metric tons of CO<sub>2</sub>-equivalents – equivalent to taking over 53,000 vehicles off the road, and currently valued at \$75 million over the lifecycle of the project.
- The facility would generate approximately 205,000 MWh of electricity per year – enough to power over 28,000 homes, resulting in annual revenues of at least \$11 million per year. Additionally, alternative energy sales opportunities such as selling steam to neighbouring industrial facilities could also prove to be even more valuable.
- The facility is also estimated to recover 5,400 metric tonnes of metal annually for recycling.
- Other waste streams could also be processed at the facility, including railway ties, specified risk materials, and other unique waste streams from local industrial facilities.

### Economic Impacts

- Development of the 300,000 tonne scale EFW facility in Southern Alberta will stimulate the energy and value-add economy which directly represents key pillar priorities framed within the Province's Recovery Plan economic diversification and energy innovation goals.
- The construction of the facility will create approx. 490 high-paying jobs over 3 years (1,471 job-years) generating approx. \$108 million in employment income, generate approx. \$442 million in business revenues (mainly in Alberta), and add approx. \$183 million in GDP.
- The ongoing operations of the facility will create an additional approx. 57 direct permanent jobs and approx. 69 indirect jobs (for a total of 126), generating approx. \$11 million in employment income.
- The EFW facility will spur additional economic development. The facility has the ability to use steam energy for district heating enabling co-location such as greenhouse, agricultural production, anaerobic digestion facilities and further providing energy to nearby industries such as meat packing plants.

### Detailed Economic Impact Estimates

Table 1: Impact of Facility Construction, Cumulative over Construction Period

Type of Effect	Output, \$M	GDP, \$M	Employment Income, \$M	Jobs (Job-Years)	Average Salary, \$
Direct	\$281.1	\$89.5	\$60.2	762.4	\$78,927
Indirect	\$106.7	\$55.7	\$33.6	435.4	\$77,146
Induced	\$54.3	\$38.1	\$14.0	273.4	\$51,337
<b>Total</b>	<b>\$442.2</b>	<b>\$183.3</b>	<b>\$107.8</b>	<b>1,471.3</b>	<b>\$73,272</b>

Note: monetary values are in 2015 dollars.

Table 2: Impact of Facility Operations, Average Annual

Type of Effect	Output, \$M	GDP, \$M	Employment Income, \$M	Jobs	Average Salary, \$
Direct	\$24.7	\$12.2	\$5.9	56.8	\$104,429
Indirect	\$14.0	\$6.9	\$3.5	42.6	\$81,355
Induced	\$5.3	\$3.7	\$1.4	26.6	\$51,389
<b>Total</b>	<b>\$44.0</b>	<b>\$22.8</b>	<b>\$10.8</b>	<b>126.0</b>	<b>\$85,421</b>

Note: monetary values are in 2015 dollars.