

**LIFT Scholarship Exchange Experience for Innovation & Technology (SEE IT)**  
**Sponsored by: WRF, WEF, and NACWA**

**TRIP REPORT**

**SCHOLARSHIP UTILITY:** *Ontario Clean Water Agency, Mississauga, Ontario, Canada*

**SCHOLARSHIP UTILITY CONTACT:** *Indra Maharjan, Director, Innovation, Technology and Alternative Delivery*

**ATTENDEES:** **Indra Maharjan**

**TRIP DATES:** November 4-7, 2019

**UTILITIES/SITES VISITED:** East Bay Municipal Utility District (November 6-7, 2019) and Wasatch Resource Recovery Facility (November 4-5, 2019)

**TECHNOLOGIES/INNOVATIONS SEEN:** **EBMUD:** Anaergia pre-processing, digestion technology and **South Davis:** Suez biological hydrolysis and pre-processing technology- Overall Organics management facility operation, trucking, QA/QC, biogas handling and cleaning and digestate management processes.

**TRIP BACKGROUND and RATIONALE (250 WORDS):**

*OCWA is working with multiple municipalities in Ontario to explore co-digestion opportunities and transform existing AD WWTP into Net Zero Resource Recovery Facilities. OCWA is currently working with City of Stratford and Town of Petawawa to design and build first co-digestion facilities in Canada. OCWA is working with technology providers like Suez and Anaergia and the trip was used to visit and gain operational experience, technology performance, procedures implemented, QA/QC, maintenance program and customer outreach at these two facilities.*

*OCWA does not have budget for these trip and hence LIFT scholarship will help learn and share the knowledge to Ontario WW system owners on design, build and operations of co-digestion facilities. OCWA also plans to share this experience with other industry stakeholders and regulators that will support in shaping the landscape for many co-digestion projects to follow.*

**TRIP SUMMARY (1 page max. Please include 10 photos and a 1-2 minute video montage from the trip. The video does not need to be professional, however if you have the means to create a professional video feel free to do so):**

- 1) *Why did you select the specific utility and technology for the visit? As mentioned, OCWA is exploring technologies from Suez and Anaergia for two co-digestion projects currently under study. There has been lots of interest around performance of these technology in reference to quality of Organics and its impact on WW treatment process, digestate management process, biogas cleaning and upgrade. Hence these two plants were*



**selected based on their existing use of technology.**

**2) *Based on your visit, do you think this technology/approach works for your utility?***

The visit and discussion with plant managers were very informative and provided lots of insights on operational adjustment and capacity building to achieve successful project. We believe the information collected from this trip will be key to ensure good design of ongoing projects and working with broader stakeholders including technology providers.

The existing organics sourcing program, odor management process and bio gas off take model will definitely be helpful and replicable for our projects.

**3) *How useful was the trip in your decision making process? What were some of the trip highlights and takeaways?***

The opportunity to see firsthand organics management process from tip floor to RNG generation and how operators are organized to operate various parts of process, its impact on WW treatment side and bio gas production was insightful. The feedback from operations team was very valuable and will be considered in our project design aspects. Also the documentation process, QA/QC and maintenance records provided lots of insight into data and operational adjustment required.

Some of the key highlights were namely;

- a) The change management process on how operations adopted Organics treatment into WW treatment
- b) Organics program development with private stakeholders
- c) Some key bottlenecks in achieving higher performance
- d) Ongoing learning and capacity development
- e) Commitment to share the performance and lessons learnt going forward

# 2019 LIFT SEE-IT Tour

**Presenter: Indra Maharjan**  
**Date: November 4-7, 2019**

# OCWA's strength

## Total Solutions

- Cost-recovery Crown Agency that shares your values
- 900+ water and wastewater facilities and ancillary systems
- \$15 Billion in client's W/WW assets managed
- Strategic partnerships
  - Innovations
  - Operations & Maintenance
  - Energy Management
  - Process Optimization
  - Asset Management
  - Engineering Services



**Municipal—53%**

**First Nations—9%**

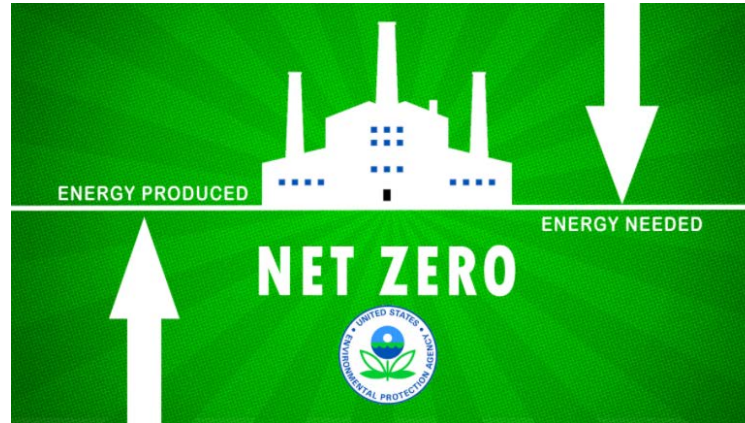
**Government/  
Institutional—9%**

**Commercial/  
Industrial—29%**

**322  
Clients**

# Co-digestion for Energy Neutrality

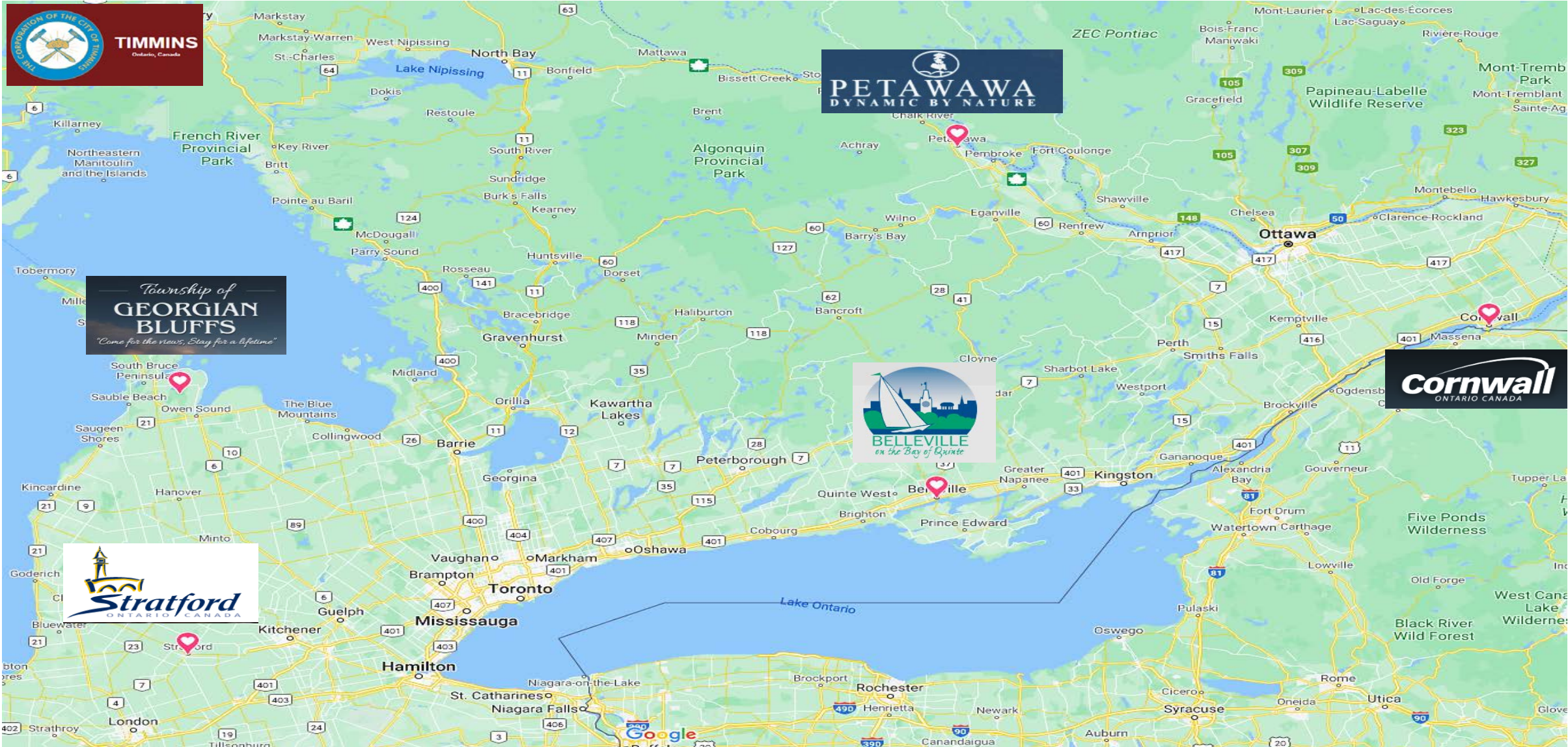
Codigestion and RNG Project

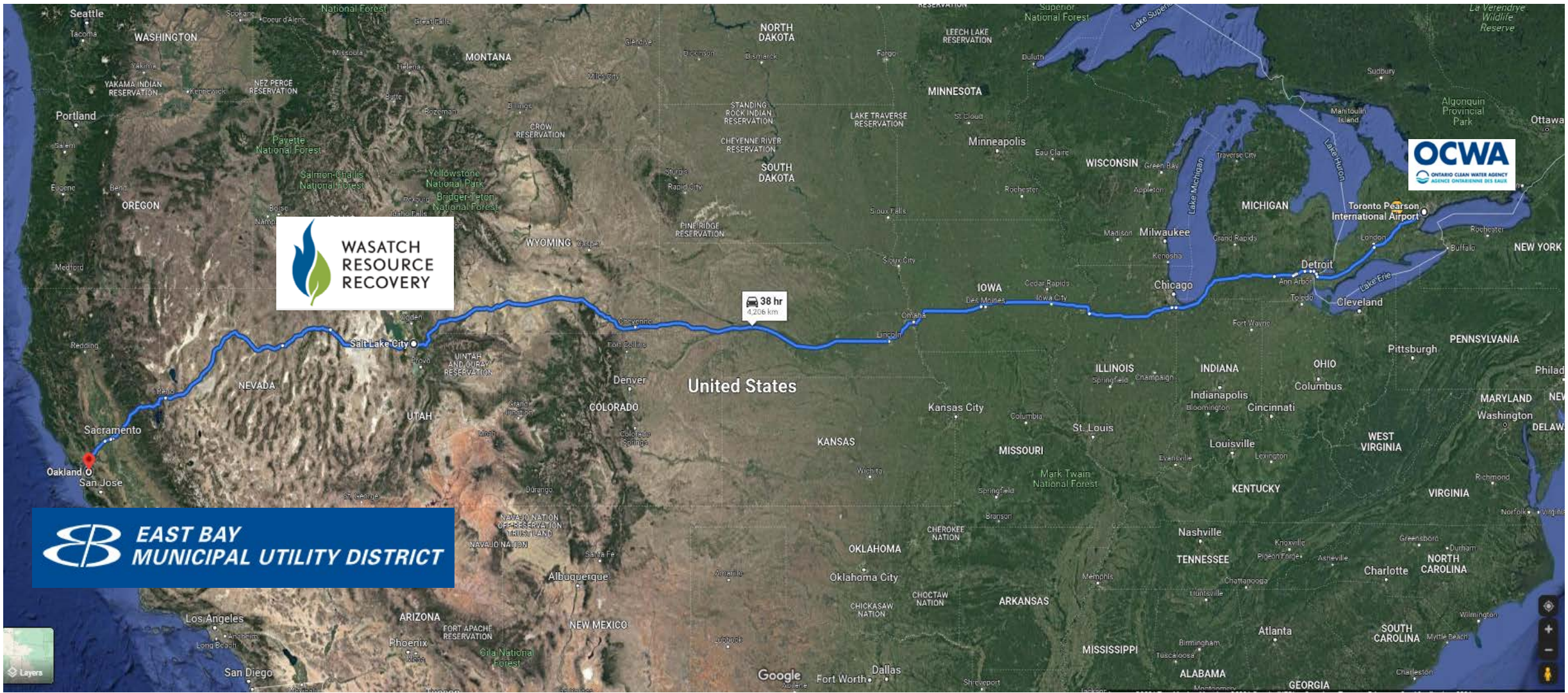


Energy Efficiency Projects Capacity and training



# Co-digestion Projects in Ontario























# Thank You

- John Hake, East Bay Municipal Utility District
  - <https://www.ebmud.com/water/recycled-water>
- Matt Myers and Jacob Udell Scott, Wasatch Resource Recovery Facility, South Davis Sewer District
  - <http://wasatchresourcerecovery.com/>