

Organics Management Solution

May 27, 2020 Regional Council Meeting



Service Excellence for our Communities

Presentation Outline

Opening Remarks

Drivers for Managing Organic Waste and Project Benefit

What is Mixed Waste, Presort and Anaerobic Digestion?

Recommended Site and Benefits

EPCOR Joint Venture

Updated Business Case

Procurement Process

Consulting Professional Fees

Next Steps



Drivers for Managing Organic Waste

Region Drivers

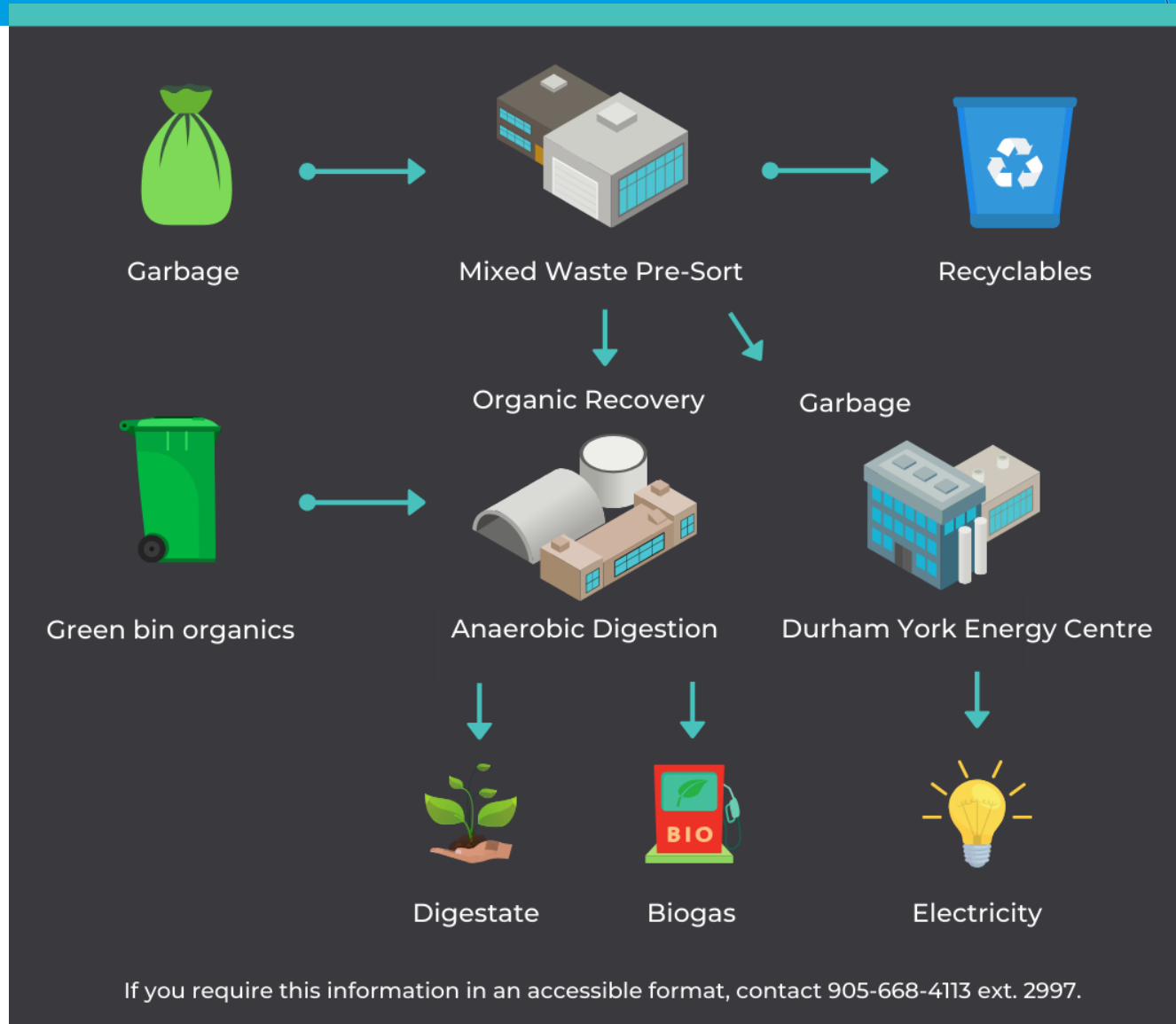
- Growth and Diversion
- Durham-York Energy Centre capacity
- Regulatory
- Address Climate Change/reduce GHG emissions

Market Drivers

- Landfill capacity
- Green bin processing capacity
- Renewable Natural Gas



What is Mixed Waste, Presort and Anaerobic Digestion?



Service Excellence for our Communities

If you require this information in an accessible format, contact 905-668-4113 ext. 2997.

Recommended Site Location

Commit to zero odour emissions

- Fully enclosed facility
- Negative pressure and biofilters

Address Climate Change

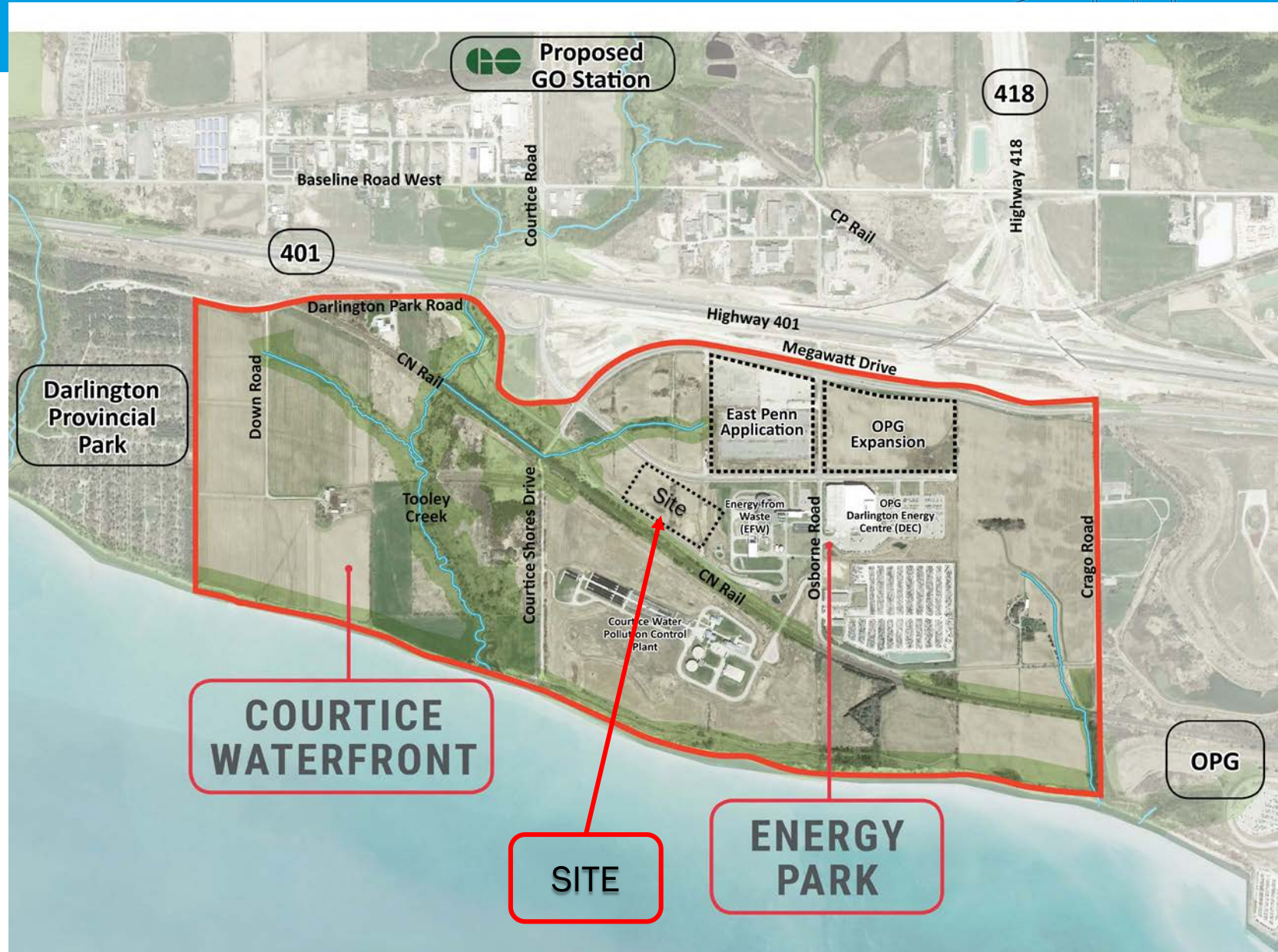
Provide natural gas into grid

Be “District Energy Ready”

Minor Traffic increase \approx 2 trucks

Synergies: DYEC and WWTP

Artistic rendering: scale/proportion



DURHAM YORK
ENERGY





Response to Comments from the Municipality of Clarington

- Clarington has declared “unwilling host” and requested a response from the Region on specific comments
- Land Use Compatibility: employment lands and impacts mitigated
- Compatible with Provincial, Regional and Local Planning Objectives
- Employment Generation: Forty direct jobs plus secondary
- Sustainable Energy Opportunity in the Energy Park
- Public Consultation in accordance Council approved plan (Public, LAM, OPG, CLOCA...)
- Urban Design will adhere to Streetscape and Sustainable Development Design Guidelines.



EPCOR Joint Venture

- Why Should the Region Pursue a Joint Venture Relationship with EPCOR?
 - Net Present Benefit of the JV to the Region
 - Risk Sharing
 - Project efficiencies and expertise/experience
 - Epcor's Industry position in Renewable Natural Gas Markets
 - Experience with large infrastructure projects
 - Understanding of Public Sector responsibilities



EPCOR Joint Venture

	Scenario 1 Joint Venture Tax Exempt	Scenario 3 Sole Ownership	Scenario 2 Joint Venture Fully Taxable
DBOM and Site Project Costs less Revenues	\$352	\$352	\$352
Capital Financing	\$126	\$162	\$126
JV Specific Components	\$58		\$101
Region Retained Risk	\$69	\$131	\$96
Total	\$605	\$645	\$675

JV, Financial and Business Case Update

- Previous business case analyses to Council in June 2017 (2017-COW-180), June 2018 (2018-COW-146) and June 2019 (2019-COW-17).
- Revised 2020 analysis includes updated:
 - Base year actuals and tonnage forecasting;
 - Project costs, revenues, and contract rates;
 - Impacts to current waste management (e.g. DYEC, haulage/transfer, by pass);
 - Renewable Natural Gas cleaning and injection to Grid for sale;
 - Detailed risk assessment (identification, quantification, and sharing); and
 - Joint Venture assessment and impacts.
- Collaborative multi-disciplinary effort with Regional staff, financial & technical consultants, & EPCOR.



JV, Financial and Business Case Update



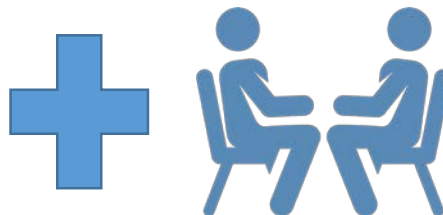
Capital Project Costing Update	2022-2023 (\$ millions)
Pre-sort/Transfer Facility	\$ 46.5
Anaerobic Digestion Facility	\$ 128.1
Biogas Upgrading and Injection	\$ 12.2
Additional Construction Related Expenditures	\$ 5.8
Total Capital Costs	\$ 192.5

Note: For the sole purpose of the business case, \$10.4 million was used as land value estimate. The Region wholly owns the land on which the Project is proposed to be built

20-Year Operating Cost Estimates	2024 (\$ millions)	2025-43 (\$ millions)	Total (\$ millions)
Operating Costs			
Pre-Sort/Transfer Operations	\$ 10.5	\$ 313.5	\$ 324.0
Organics Processing through AD (SSO and FSO)	\$ 9.4	\$ 269.5	\$ 278.9
Status Quo SSO Compost Processing Savings	\$ (8.2)	\$ (254.7)	\$ (262.9)
Digestate Management	\$ 1.5	\$ 45.8	\$ 47.3
Transfer, Haulage, DYEC/Bypass Disposal Costs	\$ (1.2)	\$ (49.5)	\$ (50.7)
Other Site/Project Operating Costs	\$ 1.8	\$ 44.0	\$ 45.7
Biogas Upgrading and Injection Operating	\$ 0.7	\$ 21.8	\$ 22.5
Operating Costs Before Revenues Sub-Total	\$ 14.4	\$ 390.5	\$ 404.9
Revenues			
Enhanced Materials Recovery and RNG Revenues	\$ (3.4)	\$ (92.1)	\$ (95.5)
Revenues Sub-Total	\$ (3.4)	\$ (92.1)	\$ (95.5)
Total Nominal Net Operating Costs	\$ 11.1	\$ 298.3	\$ 309.4



Service Excellence for our Communities



JV Partnership Costs \$118 m - \$208 m

JV, Financial and Business Case Update

- Continuing discussions with EPCOR and subsequent agreements may impact the business case, allocation of risk and financial results (positive and negative)
- Some unknowns and uncertainties remain which could change business case as Project moves forward (e.g. DBOM pricing)
- Regional staff will continue to provide updates to the business case and risk assessment at key Project milestones

Procurement Process

The RFPQ identifies the service delivery for the Project as a DBOM. The RFPQ will evaluate the proponent's submissions on the following:

- a. Technical: proposed conceptual process and reference facility of similar scale and scope;
- b. Team: experience, composition and leadership; and,
- c. Financial: track record and experience, financial approach, and financial capacity and condition.

Issue the Request for Prequalification (“RFPQ”) in or around June 2020



Additional Consulting Professional Services

- Additional consulting professional services required for the Project to RFP award phase;
 - Deloitte: up to \$800,000 for financial and business advisory services for procurement phases (RFPQ, RFP), commercial negotiations (with the DBOM vendor and EPCOR), business case updates and Co-Owners' Agreement negotiations;
 - WeirFoulds LLP's: \$400,000 for legal services related to drafting and negotiating Co-Owners' Agreement and its ancillary agreements, the DBOM Agreement and procurement process; and
 - P1: \$50,000 to oversee the Project's procurement process.
- These consulting estimates are currently below industry practices of between 7 per cent to 12 per cent of capital costs for consulting fees for large comparable infrastructure projects.

Recommended Next Steps

- Negotiate Co-Owners agreement with EPCOR
- Finalize siting in the Energy Park
- Issue RFPQ to pre-qualify potential DBOM
- Update JV, financial and business case with new info as becomes known
- Explore potential funding options for Project (e.g. DC opportunities)
- Report to Council prior to DBOM contract award

Questions

