

SWRC Waste ReForum 2022 Calculating Greenhouse Gas Emissions

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1. GOAL OR MOTIVATION	<ul style="list-style-type: none">a) Compliance obligationsb) Opticsc) Financial motivationd) Keeping up with industry trendse) All the above
2. WHAT TO MEASURE	<ul style="list-style-type: none">a) Environmental impacts – all activities have an environmental impact; determine which ones are the most profoundb) Establish a hierarchy/priority listc) Need a place to get an idea of where to start?<ul style="list-style-type: none">a. Look at the organization's financial KPIs and determine which activities carry the highest \$b. These activities will give you a sense of your major environmental impacts (i.e. energy use, waste generated, etc.)
3. BOUNDARIES – Avoid Trying to Do Everything at Once / Refine Through Iteration	<ul style="list-style-type: none">a) Map your network, locationsb) Scope I – covers direct emissions from owned or controlled sources (i.e. diesel burned in generators, fuel used for company-owned trucks, etc.)c) Scope II – covers indirect emissions from the generation of purchased electricity, steam, heating, and cooling consumed by the reporting companyd) Scope III – includes all other indirect emissions that occur in a company's value chain (i.e. company travel, company contracted services such as freight, etc.)

4. HOW TO MEASURE	<ul style="list-style-type: none"> a) \$ (Excel) vs \$\$\$ (Enablon) b) Set a baseline 1-3 years' worth of data c) Calendar vs Fiscal Year d) Data sources – invoices, fuel burned/purchased vs. kms traversed, estimates, etc.
5. CALCULATING EMISSIONS	<ul style="list-style-type: none"> a) In-house vs outsourced b) Emissions factors: GHG protocol, EPA, Environment and Climate Change Canada c) GHG: CO₂e (t) d) Air emissions: NO_x and SO₂ (t) e) Absolute calculations and intensity calculations
6. REPORTING	<ul style="list-style-type: none"> a) No reporting requirements b) Integrated reporting – financial and environmental performance c) Sustainability reporting – environmental performance only d) ESG Reporting – environmental, social (employment, diversity, occupational health and safety), and governance (ethics, supplier performance/audits) e) Alignment with Global Reporting Initiative (GRI), Sustainable Accounting Standards Board (SASB), Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD) f) External assurance – credibility
7. NEXT STEPS	<ul style="list-style-type: none"> a) Set goals (targets to support long term goals) – report only is a missed opportunity b) Create projects to reach targets c) Refine/iterate
8. QUESTIONS/COMMENTS	
9. CONTACT INFORMATION	<p>Rolando F. Velasquez Director, Compliance & Operations / Call2Recycle rvelasquez@call2recycle.ca call2recycle.ca</p>