#### GREENEST CITY SCHOLARS PROGRAM UBC Sustainability Scholars Program, Summer 2018

# Research project title

Revise the methodology for calculating and reporting on greenhouse gas emissions from contracted services used by the City

## Research supports the following policies -

S Greenest City Action Plan

Specific goal area (s): Climate and Renewables, Lighter Footprint, Green Economy, Green Transportation Renewable City Action Plan – specific action related to purchasing

Green Operations

# Scope of Work

- Review and identify gaps in the existing methodology for calculating greenhouse gas (GHG) emissions from contracted services
- Conduct stakeholder interviews, literature review, study of approaches used by other organizations to calculate the GHG emissions of contracted services
- Improve/Develop a new methodology for GHG emission data gathering and calculation to be implemented in the 2018/9 corporate GHG inventory. Review and recommend revisions to existing requirements for GHG emission data gathering and reporting to be included in City contracts for future procurement of services
- Use the methodology to identify City contracts / suppliers with the greatest GHG impacts and potential for reductions
- Support piloting of the methodology on a City project, working with Supply Chain, Engineering and Sustainability Departments.
- Develop checklist / tool to help business units identify potential projects
- Identify quick-wins (in terms of types of projects, contracts, scopes of measurement etc.) to implement the new methodology

### Why this work is of value?

Reducing GHG emissions is a key goal of the Greenest City Action Plan and the Renewable City Strategy (RCS), and the corporate Green Operations Plans. RCS Action C.14 under "Lead by example in corporate operations" commits the City to: Undertake an assessment of the carbon pollution emitted by the City's suppliers and how the City can use its purchasing power to support suppliers in adopting renewable energy and energy efficiency.

This research project is a key step in delivering on this action item. The City wishes to show corporate leadership in sustainable and ethical procurement. Greenhouse gas emissions inventories are an actionable and meaningful quantitative framework for evaluating the environmental performance of suppliers. With a more accurate understanding of GHG emissions associated with a particular good or service, the City is better positioned to work with suppliers to reduce their GHG emissions over the course of contracts. The City currently reports a subset of emissions from "contracted services" to the BC Ministry of Environment, as part of its annual emissions-reporting requirements. Based on the required scope of this subset, and upon more detailed analysis of a few key contracts, the current figure likely underestimates the emissions associated with contracted services. Thus, the City may be missing an opportunity to drive significant reductions in GHG emissions through its procurement practices. A more accurate methodology for calculating contracted services emissions would allow the City to a) understand the strategic importance of suppliers as part of a corporate GHG reduction plan; and b) focus on contracts with the greatest impact.

### When will the Scholar's work be actionable?

The Scholar's work would be actionable immediately, with the goal being to use the improved / revised methodology to calculate 2018 contracted services emissions. In addition, the new methodology will be used to identify contracts with the greatest GHG emissions and opportunity for reductions.

## Deliverables

- Summary of key interviews with stakeholders, literature review, gaps in current methodology.
- Clearly defined and validated methodology for gathering data and calculating GHG emissions for contracted services
- Identified key contracts / suppliers with the greatest GHG emissions and potential for reductions
- Identified quick-wins for application of the methodology
- Tool (e.g., checklist) to help business units / supply chain identify contracts / projects with significant GHG impacts
- Final presentation to stakeholders and a report documenting the work performed primarily focussing on the methodology
- A public facing final report (or executive summary) for the UBC USI website

### Time Commitment

- This project will take **250** hours to complete.
- This project must be completed between April 27 and July 30
- The scholar is to complete hours between (8:30 AM 5 PM, Mon-Fri) approximately 21 hours per week.

Work location: Engineering - Crossroads Building (507 West Broadway)

### Skill set/background required/preferred

- $\boxtimes$  Excellent research and writing skills
- Demonstrated interest in sustainability as it relates to construction projects
- S Familiarity with research methodologies and survey techniques
- Strong presentation and public speaking skills
- Strong analytical skills
- $\boxtimes$  Ability to work independently
- Demonstrated time management skills
- ⊠ Deadline oriented
- oxtimes Project management and organizational skills
- Strong technical and drafting skills
- Familiarity with benchmarking methods and tools
- oxtimes Familiarity with quantitative research methodologies and implementation
- Experience conducting GHG reporting especially on construction projects
- Experience conducting stakeholder interviews
- Past experience of working on municipal infrastructure projects would be considered a strong asset