Research project title

Evaluation Methodologies for Air Quality and Climate Change Policies and Programs

How will this project make a contribution to regional sustainability? Refer to the 2015-2018 Board Strategic Plan and/or a regional management plan/strategy

Actions 1 and 1.1 of the Board Strategic Plan (BSP) state that Metro Vancouver will “Develop, adopt and implement a regional climate action strategy for reducing regional greenhouse gas (GHG) emissions”, while “[ensuring] that the strategy provides a long-term vision, reflects a comprehensive analysis and provides the means for assessing progress”. Action 2.1 of the BSP states that Metro Vancouver will “identify the key threats to the region’s air quality and their sources, and pursue appropriate means for reducing or eliminating identified threats.”

To support and implement these actions, Metro Vancouver is updating the Integrated Air Quality and Greenhouse Gas Management Plan (IAQGGMP). Similar to the 2011 IAQGGMP, the new plan will include actions (which can be broad policy directions or a specific policy or program) that could be implemented by Metro Vancouver or partner agencies to reduce GHG emissions and/or improve air quality. It is critical that Metro Vancouver implement or advocate for actions that are fair and effective, while limiting negative economic or societal costs. To assist in this, Metro Vancouver needs to identify a methodology to rank and prioritize actions.

What is the purpose of the project?

The 81 actions outlined in the 2011 IAQGGMP were developed through consultation with various stakeholders. In 2010, a policy analysis was conducted by MK Jaccard and Associates for some of the GHG actions included in the IAQGGMP; however, no comprehensive policy analysis was conducted to compare the economic and health impacts of all the potential actions included in the IAQGGMP. We seek a UBC Sustainability Scholar to summarize and compare the most common methods used by air quality and climate change agencies to evaluate, compare and prioritize potential air quality and climate policies and actions. The scholar’s summary of the pros and cons of methods will inform the future approach used by the Air Quality and Climate Change team at Metro Vancouver to develop a new regional management plan and other policies.

Outline the scope of project and how the scholar’s work will be used.

The scope of the project includes the following:

- Receive summary presentation from staff on the 2011 IAQGGMP and associated relevant materials.
- Summarize available evaluation methodologies currently used by similar air quality and climate change agencies, including but not limited to the following:
  - Econometrics (economic modelling);
  - Multi-variable (attribute) analysis; and
  - Cost-benefit analysis.
Metro Vancouver
SUSTAINABLE REGION SCHOLARS PROGRAM
PROJECT PROPOSAL – 2017 Intake

• Interview air quality or climate change agencies (preferably at a sub-national level) that have used any summarized methodologies, to understand how they work in practice. Expect 1-2 interviews to be conducted per methodology.
• Provide summary presentation on methodologies to Air Quality and Climate Change staff and other critical stakeholders.
• Prepare report summarizing methods and identify recommended approach for Air Quality and Climate Change team at Metro Vancouver.

Project Deliverables

• Interview notes
• Draft report
• Final report
• Final report/executive summary for the UBC Sustainability Scholars project library

Project Timeline

It is assumed that the Scholar will complete 250 hours between May 1 and August 11, 2017. The successful candidate will work directly with the project lead to determine the project timeline based on the Scholar’s schedule and commitments. This will involve developing a draft work plan and schedule including meetings with project leads.

• May: Project kickoff; 2011 IAQGGMMP and methodology review
• June: Jurisdictional interviews
• July: Example demonstration of methods and summary presentation
• August: Reporting; final report due August 11, 2017

Describe the required/preferred skill set and knowledge base for a Scholar

Researchers from political science, economics, public administration, public policy, environmental studies, community and regional planning and other related disciplines with a particular emphasis on the following:

• Policy analysis and evaluation
• Economic policy analysis
• Air quality policy
• Climate change policy
• Sustainability

Identify specific requirements required for completing this project (if any)

• Experience designing and conducting research interviews
• Attention to detail
• Excellent written and spoken communication skills
• Ability to work independently
• Demonstrated ability to apply critical thinking and analytical skills to research and analysis