Summer 2020 Internship Projects

Below is a list of the Sustainability Scholars projects available for the summer 2020 program.

This list is current as at January 14, 2020.

Please check online for detailed descriptions of each project.

Applications accepted until midnight on February 2.

Please review the website for details about the Scholars Program. If you still have questions, contact sustainability.sholars@ubc.ca

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2020-01 Researching a circular economy of plastics in health care (Vancouver Coastal Health)

Health care is a unique context that requires additional considerations when it comes to implementing environmental sustainability initiatives and circular economy practices. This project will research what those considerations are, and identify challenges and opportunities for implementing circular economy practices in health care.

2020-02 Aligning safer chemicals with patient care in BC health care facilities: research, development and engagement (Vancouver Coastal Health)

The project contributes to an existing strategy that seeks to improve understanding of current use of chemicals, exposures and risks to staff, patients and the environment, develop an approach to monitoring use of chemicals of concern, and work with key stakeholders on reducing/eliminating purchases of chemicals of concern. The purpose of the project is to update and expand existing chemical ingredient lists for personal care products and to raise awareness about product choices that are safe to staff, patients and the environment

2020-03 A Review of Climate Adaptation Planning for Transit Agencies (TransLink)

The outcome of this project support TransLink in developing a climate adaptation plan for transit infrastructure, infrastructure planning, and operations with a focus on assets and resiliency. Work includes a scan of climate adaptation plans from a select number of transit agencies around the world and a summary of the common elements of a climate adaptation plan for transit focusing on assets and resiliency.

2020-04 A review and analysis of transit agency intergovernmental agreements for major transportation investments (TransLink)

Review of the Supportive Policies Agreements and tools that North American and/or European transit agencies use in partnering with local governments (and other entities) to achieve success for major transit projects (e.g., rapid transit). The research conducted through this project will inform TransLink's approach to future Supportive Policies Agreements, including considerations regarding process, content, and scope.

2020-05 Culturally-Appropriate and Energy-Efficient Housing on Reserve: Considering the role of housing standards in promoting energy saving opportunities among First Nations in B.C. (Fraser Basin Council/BC Ministry of Energy and Mines)

This project will help identify opportunities for strengthening policies and programs to support culturally appropriate and energy efficient housing. Work includes a literature review, development of case studies, a legal scan and a program/policy scan.

2020-06 Healthy beverage designation program at UBC: Environmental scan and implementation Plan
A Healthy Beverage Initiative (HBI) designation program would function like programs such as Ocean Wise or Fair Trade where the HBI logo would have a pre-determined criterion for use and signify a commitment to a healthy beverage environment and support of the overall Healthy Beverage Initiative. The work of the scholar will inform a future toolkit to support the implementation and evaluation of a HBI designation program

2020-07 Mental health literacy campaign best practices review and recommendations (UBC)
The purpose of this project is to inform the development of an updated visual identity and communication plan based on best practices and lessons learned from other successful mental health literacy campaigns that target diverse populations. The Scholar's work will be used to guide a rebrand of the existing UBC Thrive campaign. The project entails research, scoping, and stakeholder engagement across campus to ensure that Thrive resonates with the identified audiences and represents the work that is happening around mental health literacy at UBC.

2020-08 Envisioning a physical food hub at UBC Okanagan
Addressing food security requires multiple strategies, one component is establishing food spaces on campus that support increases in food knowledge and skills, healthy eating, and social connections around food. Project work includes an environmental scan of physical food hubs on campuses in North America, interviews to identify best practices, a review of published and unpublished literature, and development of two to three prototypes on which to gather feedback.

2020-09 Knowledge Mobilization for the Healthy Workplace Initiative Program: Stories of Success (UBC)
The outcome of this project will be much-needed communications and knowledge mobilization support. This project involves both evaluation (analyzing data and interviewing stakeholders) and program enhancement (developing a toolkit). This will be achieved through utilizing 12 years of data available from the Healthy Workplace Initiatives Program (HWIP) to help departments and units understand how to embed wellbeing in their workplace culture and programs.

2020-10 Understanding community resilience and opportunities to provide wellbeing support amidst the climate crisis (UBC)
This project will inform actions and recommendations at UBC by mapping out current research and best practices in addressing mental health impacts and fostering resilience at the community level, with a particular focus on higher education. Research will be used by campus partners, including UBC Wellbeing and the UBC Climate Hub, to inform progress towards existing wellbeing support goals and the development of future plans and policies.

2020-11 Research to understand climate grief/anxiety impacts on student mental health and wellbeing (UBC)
We expect that climate grief/anxiety will increasingly become a significant mental health issue. To ensure that UBC student-facing services can provide the best possible support to students a better understanding of the emerging research, best practices and recommendations in this field is needed. Project work includes a literature review, development of a framework for surveying student clients of UBC counselling services, and draft recommendations for next steps for student counselling to consider.

2020-12 Laying the groundwork for quantification of carbon sequestration and emissions for land-applied Metro Vancouver biosolids.
Metro Vancouver has undertaken research to understand the GHG implications of the land application of biosolids; however, the work hasn't been systematic and some of it draws on assumptions that may no longer be valid. This project will synthesize and evaluate those historic investigations and identify gaps that remain for Metro Vancouver to better understand and quantify emissions and sequestration from biosolids applied to land.

2020-13 Identification of potential significant dischargers to the wastewater system in the Metro Vancouver region that are not currently captured in the permitting process.
The purpose of this project is to identify industries that 1) need a permit to discharge to the wastewater system and 2) that may not need a permit at this time (but might in the future), and 3) prioritise them based on the risk to the wastewater system. The focus will be on industries that discharge BOD, TSS, and metals that are specified in the Sewer Use Bylaw. This project involves development of a database, a risk assessment and mapping of potential dischargers in Google Earth.

2020-14 Evaluating and Reducing Microplastics in Metro Vancouver Wastewater Treatment
Although WWTPs are effective at removing a large amount of microplastics from the liquid waste stream, a large proportion of particles are retained in residual biosolids. The current industry standard throughout North America is to land-apply the majority of biosolids as fertilizers. This project involves a desktop literature review to gather existing information on all potential sources of microplastics in WWTP influent, assessment of the efficacy of existing treatment strategies and technologies to remove microplastics from the solids stream (biosolids), and a summary of the environmental effects of microplastics in land-applied biosolids.

2020-15 Investigating the effectiveness of stormwater source controls in managing urban stormwater quality and quantity (Metro Vancouver)
Information from this project will lay the foundation for updating the Stormwater Source Control Design Guidelines 2012 (SSCDG) for Metro Vancouver. The project involves gathering and synthesizing past performance information on the six source control technologies in the existing SSCDG, identifying new technologies and applications, and assessing the relative effectiveness of the existing and new technologies.

2020-16 Review of the Emerging Use of Activated Carbon or Biochar Media as Stormwater Source Controls (Metro Vancouver)
The goal of this project is to better understand emerging stormwater source control technologies that use various forms of activated carbon or biochar. Project work includes a literature review to summarise and identify source control technologies, including where and how they have been tested, their effectiveness at removing metals, nutrients, and other constituents of environmental concern (such as PAHs, PFAs, etc), costs and other relevant information.

2020-17 Integrated Analysis of Economic Methods for Evaluating Environmental Damages from Stormwater Contaminants (Metro Vancouver)
The purpose of this two-person project is to inform and improve regional stormwater pollutant control decision making. This will take place by providing estimates of the economic value of avoided damages associated with reducing stormwater pollution, which can be used in triple bottom line decision making and financial analyses to assess and prioritize potential stormwater pollution reduction projects.

2020-18 Examination of how to measure and manage environmental, physical and experiential capacity of regional parks (Metro Vancouver)
The purpose of the project is to support management of regional parks by examining how to measure and manage environmental, physical and experiential capacity for regional parks. This research will inform and help the Regional Parks Service create forward-looking strategies to manage park visitors, visitor experiences, and natural resources as park demand increases

2020-19 Scan of the International Status of Engine Electrification & Assessment of Opportunities for Key Sectors in the Metro Vancouver Region
This project will help Metro Vancouver understand the current state of electric engine technologies worldwide and how these might be applied in the region to reduce emissions from a range of specific sectors. The second phase of the project will explore opportunities for electrification of non-road engines and regional opportunities to implement electric engines.

2020-20 Research to understand agricultural waste management practices and barriers to avoiding open-air burning of vegetative waste in the Metro Vancouver region
The purpose of this project is to improve understanding of agricultural wastes, current waste management practices, and barriers to increased recycling and reducing open-air burning of waste. The research will draw attention to best practices in the region to identify opportunities for enhanced waste reduction and recycling that could be promoted to other farmers as alternatives to open-air burning of waste.

2020-21 Trend Analysis on background levels of ground-level ozone for Renewal of Regional Ground-Level Ozone Strategy (Metro Vancouver)
The science and understanding on ozone formation has continued to evolve since the adoption of Regional Ground-Level Ozone Strategy (RGLOS) in 2014. Additional research is needed to understand the contribution of background ozone levels to measured ozone levels in the Lower Fraser Valley (LFV) airshed. This project includes identification and a summary of recent trends on background ground-level ozone based on an analysis of provided data and other research to support the planned renewal of Metro Vancouver's RGLOS.

2020-22 Developing long-term forest monitoring strategies to address the impacts of climate change on Metro Vancouver's water supply areas
The purpose of the project is the integration of information for adaptation that supports biodiverse and resilient forests, particularly as it relates to drinking water quality and the protection of natural assets for the 2.5 million residents of Metro Vancouver. The focus will be on the development of long-term monitoring strategies that can be used to adapt to the anticipated climate changes so that Metro Vancouver is able to maintain resilience in the regional drinking water supply.

2020-23 Reassessment of the Greater Vancouver Water District Secondary Disinfection Strategy (Metro Vancouver)
This study will help reinforce and determine the effectiveness of secondary disinfection within the Metro Vancouver region. As part of this study, the scholar will conduct a review of available background information and historical water quality data to identify vulnerabilities and potential opportunities for improvement and optimization. A review of historical data for chlorine residual, heterotrophic plate counts and disinfection by-products in the Metro Vancouver and local government distribution systems is also required.

2020-24 Developing an Embodied Carbon Primer for B.C. Single and Small Multi-Family Homes (ZEBx)
The outcome of this project will identify the primary design and construction attributes that drive embodied carbon in highly insulated, near zero emission homes by quantifying the results of 1 to 3 recently built near zero emissions projects in Vancouver. Research includes defining embodied carbon, communicating its relevance to mitigating climate change in single-family homes, documenting the leading and relevant tools, standards and methodologies for embodied carbon, etc with the final output being an embodied carbon primer to educate and inform builders and designers of single and small multi-family homes.

2020-25 Energy consumption and greenhouse gas annual inventory report & recommendations (Resort Municipality of Whistler)
The purpose of this project is to complete Whistler's annual energy and GHG inventory report. Project work includes collecting and analysing various energy and GHG data sets, connecting with utilities and facility managers to verify and explain the results, and summarize findings in a detailed research report that is accessible to the broader community of the Resort Municipality of Whistler.

2020-26 Assessing the Embedded Emissions of Building to the Energy Step Code (City of Richmond)
The objective of this project is to assess the embedded emissions of buildings that have been designed to meet various performance targets of the Step Code. The work will include establishing a benchmark by assessing the embedded emissions of typical, new residential buildings in Richmond; assessing embedded emissions of various high-performance designs and low-carbon energy systems; and, time permitting, review and development of policy options that can lead to lower overall emissions

2020-27 Role of local governments in supporting Energy Advisor capacity in small and rural communities (Community Energy Association)
This project will identify ways in which small and rural local governments can support Energy Advisor (EA) capacity in communities that currently do not have a local EA. Furthermore, the outcomes of the research will help inform the Energy Step Code Council about possible interim solutions to the EA capacity crunch in advance of future Building Code updates that will require the use of an EA for compliance.

2020-28 Assessing Industry Capacity to Deliver Energy Retrofits in Kamloops
This project aims to develop a strong understanding of the realities facing the local retrofit industry in Kamloops, so that the City can more effectively address the identified challenges and opportunities in the programs and policies that it is developing and implementing. The project outcomes will help the City of Kamloops shape future policy and program design with the aim of increasing the uptake and impact of energy retrofits in our community.

2020-29 Centering equity and affordability in climate action plans, policies, and programs (City of Abbotsford)
The Scholar will use the Canadian Urban Sustainability Practitioners' (CUSP) Energy Poverty and Explorer Tool (guidance and training provided) to increase the City of Abbotsford's understanding of how to address equity and energy affordability through the design and delivery of more impactful and inclusive GHG reduction plans, policies, and programs. Specifically, this project will help to determine targeted program elements and considerations for one or both of advancing building retrofits and electric vehicle strategies.

2020-30 Centering equity and affordability in climate action plans, policies, and programs (District of Saanich)
The Scholar will use the Canadian Urban Sustainability Practitioners' (CUSP) Energy Poverty and Explorer Tool (guidance and training provided) to increase the District of Saanich's understanding of how to address equity and energy affordability through the design and delivery of more impactful and inclusive GHG reduction plans, policies, and programs. Specifically, this project will help to determine targeted program elements and considerations for one or both of advancing building retrofits and electric vehicle strategies.

2020-31 Recommissioning study for city-owned buildings to improve building systems performance and reduce GHG emissions (City of New West)
This project involves conducting a recommissioning (retrofitting) study for City-owned buildings for the purpose of improving existing building systems performance and reducing GHG emissions towards meeting the City of New Westminster's new targets. The Kitsilano Community Centre recommissioning project will be used as the prototype for the study.

2020-32 Impact of architectural design on the solar PV generation potential of a house to achieve its net-zero energy target (BC Housing)
Often, net-zero energy design studies only look at the level of energy efficiency that is required to achieve a net-zero energy design. However, some architectural design choices can significantly reduce the amount of suitably orientation roof area to generate enough solar electricity to offset energy consumption. This project will examine the impact that architectural design (form, # of stories, roof design, and orientation) has on the total PV generation potential of the roof.

2020-33 Analysis of energy consumption of different architectural design decisions (BC Housing)
This project will model the energy intensity of houses having a variety of different architectural features (e.g. size, number of stories, articulations, open floor plans, window-to-wall ratio, etc.) in order to get an understanding of the impact of these choices on the thermal energy demand intensity in climates across British Columbia. The goal is to be able to generate a guide that would help educate stakeholders (architects, designers, builders) on the implication of these architectural design choices on the energy intensity, and hence the BC Energy Step Code.

2020-34 Land Use Policy and Regulatory Barriers to Low Carbon Resilient Housing (BC Housing)
This project will survey, examine and evaluate the impact of land use policy and regulatory barriers that are currently limiting the affordability and resilience of low carbon net zero energy housing in B.C. The results from this project will form the basis for the future development of a strategy and process to prioritize and sunset regulations and bylaws that are anticipated to become obsolete or counter-productive in the near future.

2020-35 Low carbon electrification opportunities for social housing: Benefits and barriers to achieve deep GHG reduction (BC Housing)
This project involves reviewing and compiling information from various energy modeling/energy studies and renovation projects targeting different levels of electrification and GHG emission reductions for the purpose of evaluating the potential for implementation across the BC Housing social housing portfolio. The main focus will be to find the barriers and challenges to install heat pumps for different services (space heating, domestic hot water heating, ventilation, cooling), and how feasible they are to install and maintain in different building types and locations.

2020-36 Total Cost of Ownership (TCO): An evaluation study for Social Housing and implications on design decisions (BC Housing)
Project works includes reviewing and compiling costing data from a sampling of recently completed new construction social housing buildings (for their entire life cycle) including categories such as initial cost, energy cost, operations and maintenance cost, replacement cost, disposal cost, non-monetary cost, etc. Data will be used to determine the Total Cost of Ownership (TCO) when different design and construction strategies are implemented, with emphasis on the different levels of the BC Energy Step Code, passive house strategies and low carbon electrification (among other things).

2020-37 Understanding best practices and key barriers to scaling zero emissions homes in B.C. (ZEBx)
The outcome of this project will identify emerging best practices and key barriers to scaling zero emissions homes in B.C. The project will also compare how the best practices and key barriers align with existing knowledge and resources and identify gaps where appropriate.

2020-38 Implementing the BC Energy Step Code in Part 3 (non-residential) buildings in the Township of Langley
This project includes development of a case study of other BC municipalities that already have policies in place for Part 3 buildings. The Scholar will research and analyse of which rebates/incentives are the most successful for these programs. This research will support the Township of Langley develop an overarching plan on how to successfully implement the BC Step Code for Part 3 (non-residential) buildings and support the building community with education, capacity-building, and effective incentive programs.

2020-39 Informing a roadmap for benchmarking energy and emissions associated with Complex Buildings in the Capital Regional District
In BC's Lower Mainland several municipalities are working with OPEN Technologies on benchmarking. In the Capital Regional District (CRD), municipalities in the urban core (City of Victoria and the District of Saanich) have begun working on benchmarking of Complex buildings through the BOMA District 2030 project. However, it is unclear if these, or other, approaches are applicable to the CRD in its entirety (13 municipalities and 3 electoral districts). This project will provide the research and analysis to answer that question and, in doing so, provide the basis for a CRD building benchmarking roadmap.

2020-40 Incorporating Embodied Carbon into Sustainable Decision-Making in Construction at the Vancouver Airport Authority
The outcome of this project will help to determine how the Vancouver Airport Authority (VAA) can calculate embodied carbon emissions in the development of projects, and how to use this information in making decisions that help the airport achieve its target to reach net zero greenhouse gas emissions by 2050. Work includes a best practices review to determine methods and tools used in calculating embodied carbon in development projects; at least 4 case studies; a review of current VAA development processes to determine how carbon is currently accounted for; and recommendations on a framework for calculating embodied carbon in construction and development projects.

CITY OF VANCOUVER PROJECTS

2020-41 Researching a shared transportation program for low-income residents with mobility challenges
The City of Vancouver is developing a Poverty Reduction Plan to reduce poverty and address fundamental economic inequities in the City. The purpose of this project is to assess transportation gaps for low-income

individuals with mobility challenges and identify opportunities for new shared transportation models, including a business plan with pilot options.

2020-42 Exploring the use of licensed group childcare facilities for community programming outside childcare hours
Project work will include undertaking a brief literature review of best practices, an inventory of non-childcare programming, and site visits and phone and/or in-person interviews with selected childcare operators, in order to recommend how the City of Vancouver can better support the potential of neighbourhood-based childcare centres in meeting community needs beyond licensed childcare policy and priorities.

2020-43 Investigating barriers to electrical panel upgrades in home retrofits
A primary barrier to electrifying many homes is the limited electrical panel capacity and potential need to upgrade the utility infrastructure to support an all-electric home transition. This project involves researching current 'smart' home load management systems that can minimize the peak load on a panel; speaking with local panel suppliers to understand current product availability; and, working with BC Hydro staff to understand the triggers and costs for electrical capacity upgrades, and what could be done to streamline or minimize costs.

2020-44 Strategy for transitioning the False Creek Neighbourhood Energy Utility to 100% renewable energy
The Scholar will identify, assess, and evaluate options for increasing the NEU's renewable energy supply to 100%. This will include a literature review of leading district energy systems; Interviewing operators, consultants, and industry leaders; identifying renewable energy options and strategies; performing a technical and economic evaluation of each option identified; and, preparing recommendations.

2020-45 Supporting the creation of walkable complete communities built on a foundation of understanding diversity and unique human qualities
Support the City Design Studio to conduct background research on walkability. Includes: literature review of walkability frameworks, metrics and indicators, summary of literature on walkability as it relates to equity, summary of the qualitative aspects of a good walking experience, development of principles, and creation of questions to ask during engagement.

2020-46 Determining the impact of retail/commercial redevelopment on existing businesses
Research and analysis to identify the implications of redevelopment and building age on the viability and presence of small and independent businesses. This will include a review of scholarship and studies from other jurisdictions and analysis of City of Vancouver data. The study will be restricted to ground-level businesses in Business Improvement Areas located outside the Downtown Peninsula/Metro Core (i.e., shopping areas located in residential neighbourhoods serving local neighbourhood needs).

2020-47 Understanding the impacts of ride-hailing vehicles on congestion and the City of Vancouver's climate emergency response
The City of Vancouver would like to monitor the early stages of how ride hailing impacts the City as a whole in terms of congestion, and also how it can impact a user's choice of travel mode. The project proposes to assess this with a report summarizing data sets provided from ride hailing companies related to demand, VKT, and origin destination, a comparison of ride-hailing policies used in different cities around the world and a summary of consultation/interview with contacts from other cities.

2020-48 Roadmap for equitable engagement strategies to support the City of Vancouver's transportation planning
Compile best practices from cities around the world on equity in transportation and major infrastructure projects. Undertake a review of equity-focused engagement, promotion and outreach strategies, specific to transportation, and conduct phone or in-person interviews with selected cities and local community organizations to learn about their effectiveness, strengths and lessons learned. Conduct an equity audit of three City of Vancouver transportation projects and identify areas for improvement for future transportation related work.

2020-49 Supporting the Urban Freight Strategy: Mapping the City of Vancouver's loading facilities for on- and off-street delivery activity
The purpose of this work is to develop the initial framework for a modern city approach to managing our freight delivery activity within the City of Vancouver. By studying other cities successes (and failures) and establishing a comprehensive data inventory of our loading facility assets, we can move forward with a variety of progressive urban freight solutions that will ultimately reduce GHGs, promote livability, and support our thriving economy.

2020-50 Best practices for a business sector campaign to reduce wasted food: encouraging behaviour change and sustainable practices
Undertake a literature review of best practices that encourage behavioural change within businesses in order to develop a campaign that encourages the voluntary implementation of practices, policies and training to reduce the occurrence of wasted food and associated GHG emissions within the grocery retail sector. Based on findings create a rationale for the engagement approaches selected; develop and test compelling elements of a campaign using these approaches; workshop/focus group/test campaign approaches and elements.

2020-51 Identifying a range of typologies and favorable conditions for regenerative and low-maintenance green rainwater infrastructure in right-of-ways
This project involves research on opportunities to integrate regenerative and low maintenance strategies in green rainwater infrastructure (GRI) implementation in right-of-ways. The work will include gathering information on GRI implementation in the right-of-way; gathering information on best practices implementing low-maintenance GRI; determining relevant plant species; site visits to identify barriers and opportunities.

2020-52 What does "Access to Nature" mean to Vancouverites, and can we map it?
Undertake a literature review of different definitions of "access to nature" and how these definitions are used by municipalities in planning for provision of natural areas for community health and wellbeing benefit. Conduct engagement with Vancouverites to understand what they believe constitutes a "nature experience", where and when these experiences can be found in their day-to-day lives. Develop a Vancouver-specific working definition of "access to nature" that can be mapped spatially.

2020-53 Understanding the best way to advance natural capital valuation (economic / social / and health benefits) of Vancouver's parks and open spaces
Undertake a literature review of the best practices used to value the services and benefits provided by park spaces, primarily at municipal scale, but also provincially and nationally. Develop a Vancouver-specific methodology to quantify valuation that can be applied to various recreational park open spaces and natural areas in the system. Develop a comparison amongst Vancouver's parks, noting measurable factors where data is available, such as: size, elements, sunlight shading by buildings, transportation noise tranquility, tree canopy cover, unnatural light level, etc.

2020-54 Biodiversity audit of Vancouver Park Board golf courses

Undertake a literature review of the best practices used to evaluate biodiversity in urban recreational spaces. Develop a methodology to evaluate biodiversity that is appropriate to the focus sites and can be applied to other recreational parks and natural areas in the system. Evaluate the significance of biodiversity in Fraserview, Langara and McCleery Golf Courses based on the developed methodology. Develop a comparison to other international parks and golf courses.

2020-55 Exploring Opportunities & Challenges Associated with Managing Rainwater from Private Properties on Public Lands

The purpose of this project is to understand best practices most applicable to the City of Vancouver for managing rainwater in the public realm that has been received from lands in the private realm. Includes consideration of aspects such as rainwater transfer consideration criteria, design standards/guidelines, operation and maintenance requirements, lifecycle costs, funding mechanisms for apportioning costs, and mechanisms to manage risk. Variations in approach to new development versus existing stock/retrofits, as well as to different uses and densities of private development should be considered.

2020-56 Exploring Mandatory Home Warranty for Developments that Incorporate Green Rainwater Infrastructure

The City is actively promoting the adoption of Green Rainwater Infrastructure across all industries and is committed to a smooth delivery of these policies and to reduce hardships placed upon the development industry to achieve compliance. The proposed project will begin a critical piece of work to fully understand the impacts of including GRI in new developments and will be foundational in informing future research and work programs in this regard.

2020-57 Clean Transportation Market Forecast

The Clean Transportation Market Forecast is modeled on the wildly successful Green Building Market Forecast (GBMF) completed by VEC in 2018-19. The scholar will play a critical role by reviewing, collating, and synthesizing relevant transportation plans and policies, defining the stakeholder group for engagement, and identifying relevant data sources for the Clean Transportation Market Forecast.

2020-58 Feasibility Study: Electrifying the Stanley Park Train

Assess the feasibility of electrifying the diesel-powered Stanley Park Train. Research different electrification options, including retrofitting and purchasing new. Evaluate financial, technical, timeline, and regulatory requirements/impacts, including a high-level scope of work for each option. Provide a comprehensive cost-benefit analysis of electrification options.

2020-59 Best practice review of circular economy design certification practices and applicability for procurement at the City of Vancouver

The goal of this project is to complete a global review of leading practices with respect to circular design standards, certification and procurement programs and to identify options for promoting circular design and procurement locally. Project work includes researching leading practices, interviewing representative staff at the City responsible for procurement (of products, equipment, infrastructure, and services), and recommending possible ways for the City to encourage more sustainable circular design and procurement, including proposing possible certification programs.

2020-60 Advancing Sustainable Commuting: Demonstrating City Leadership in Response to the Climate Emergency
Review existing sustainable commuting facilities at City worksites, current staff commuting behaviour and barriers to zero-carbon commuting (based on existing survey data, best practices used by cities and organizations around the world to facilitate and incentivize sustainable commuting by employees. Help develop a leading standard for City sustainable commuting facilities and/or programming as an example to other employers and commercial landlords in Vancouver.