

PRIMARY CONTACT  
Suzanne Goldberg  
Office: 1-778-558-3617  
sgoldber@sfu.ca

School of Resource and  
Environmental Management

ADDRESS  
TASC 1 Building, Room 8411  
Simon Fraser University  
8888 University Drive  
Burnaby, B.C.  
V5A 1S6 Canada

RECRUITING A PHD STUDENT IN THE MODELING OF LOW CARBON  
TRANSPORTATION TECHNOLOGY AND POLICY  
(FEBRUARY 2016)

The Sustainable Transportation Action Research Team (START) in the Resource Environmental Management Program at Simon Fraser University (Burnaby, British Columbia, Canada) is a dynamic group that takes an interdisciplinary approach to research on sustainable transportation solutions. START seeks to fill a PhD position for interdisciplinary research relating to the modeling of low-carbon transportation technologies and systems, starting in mid-2016. The research conducted in this position is part of a larger cross-faculty (across three faculties) project on low-carbon transportation which integrates the social, economic and technical analyses of alternative fuel vehicles such as hydrogen fuel cell and battery electric vehicles.

**The successful applicant will build on START's previous modeling efforts to develop a comprehensive transportation modeling tool** that accounts for all major transportation systems (e.g. personal, transit, freight) and related systems dynamics, such as fuel production and distribution, refueling and recharging infrastructure, and environmental impact (e.g. well-to-wheel Greenhouse Gas Emissions). The initial focus will be modeling Canada's transportation sector, though applications to other countries are possible. Previous work in this area includes the modeling of alternative fuel technology adoption in the personal and freight sectors, modeling the impacts of alternative fuel policy in the passenger and freight sectors, and modeling the electric system and GHG impacts of electric vehicle adoption. Applicants should clearly demonstrate that they have skills in more than one of the following areas:

- energy-economy modeling (e.g. optimization or simulation models),
- transportation modeling,
- energy supply modeling,
- agent-based modeling,
- climate and transportation policy analysis,
- alternative fuel transportation technologies,
- alternative transportation fuel production and/or distribution, or
- market analysis of alternative fuels or low-carbon technology.

**The applicant should also demonstrate** a strong academic background, including a competitive grade point average (or equivalent), and excellent skills in communication (writing, presenting, etc.), project organization, and working both collaboratively and independently. Ideal candidates will be eager to conduct novel, applied research in the interdisciplinary field of low-carbon transportation systems, and to publish results in top-level academic journals. Applicants should already have attained a Master's degree—though those with only a Bachelor's can still apply for our [Master's program](#). All qualified candidates are encouraged to apply. It is our intention to provide a competitive stipend for this position (subject to funding), though successful applicants will also be expected to apply for any relevant scholarships to support their stipend.



FACULTY OF THE ENVIRONMENT  
SUSTAINABLE TRANSPORTATION RESEARCH TEAM

**The Resource and Environmental Management Ph.D program:** Ph.D. applicants should look closely at [the REM program's requirements](#), which requires students to complete courses and demonstrate competence in basic environmental economics, public policy and environmental science over the course of their Ph.D. Graduates in the REM program enjoy an extremely high employment rate, moving to leadership positions in government, industry, consulting, and academia.

### **Instructions for application**

Please include...

- a concise cover letter, outlining your specific experience and skills that make you suitable for this position,
- a CV,
- up to three publications or writing samples, and
- a list of at least three academic references (contact names, emails and phone numbers).

The first paragraph of the cover letter (and email) should clearly indicate how the applicant's research skills and interests align with the overall research scope. Applications will be accepted until the position is filled. **Review of applications will start late February 2016.** Only short-listed candidates will be contacted. Please send all applications electronically to:

Suzanne Goldberg, Adjunct Professor  
START, School of Resource and Environmental Management  
Simon Fraser University  
TEL: 778-558-3617; e-mail: [sgoldber@sfu.ca](mailto:sgoldber@sfu.ca)



FACULTY OF THE ENVIRONMENT  
SUSTAINABLE TRANSPORTATION RESEARCH TEAM

DR. JONN AXSEN AND THE SUSTAINABLE TRANSPORTATION ACTION  
RESEARCH TEAM (START)

**About Dr. Jonn Axsen and the School of Resource and Environmental Management:**

Dr. Jonn Axsen is an Assistant Professor in the School of Resource and Environmental Management (REM) at Simon Fraser University. His research focus is on consumer behaviour and citizen acceptance regarding low-carbon energy and policy. His research program centres around four broad themes: the adoption of pro-environmental technology, pro-environmental motivations (social influence, lifestyle and values), citizen acceptance of energy technology and policy, and modeling effective low-carbon technology and policy. Dr. Axsen is the director of SFU's Sustainable Transportation Action Research Team (START), and co-director of the Energy and Materials Research Group (EMRG).

**About the Sustainable Transportation Action Research Team (START):** START is a research collaborative within the Faculty of Environment that focuses on the transition to sustainable transportation systems. START takes a unique interdisciplinary approach to its research, drawing from disciplines such as economics, marketing, engineering, innovation management, health sciences, geography, public policy, urban studies, communications and psychology into the analysis of sustainable transportation solutions. START produces policy- and industry-relevant research in three key aspects of sustainable transportation: vehicles and drivetrains, fuels and infrastructure, and mobility and travel demand. For each aspect, START produces comprehensive research to assess different transportation technologies, practices and solutions according to technological feasibility, consumer and citizen acceptance, and public policy.

For more info, visit:

- The REM web site: <http://www.rem.sfu.ca/>,
- Dr. Axsen's webpage <http://www.rem.sfu.ca/people/faculty/jaxsen/>