

**Canada School of Energy and Environment  
Proof of Principle Program**

**Terms of Reference**

**Objective**

The Canada School for Energy and Environment (CSEE) aims to

*Facilitate technology transfer and commercialization in the area of natural resources, energy development and environmental sustainability through proof of principle funding.*

The objective of the proof of principle program is to advance initial research and technology results to the next level of impact on *knowledge transfer, policy development* or *technology commercialization*. Proof of principle projects have as their purpose a refinement or investigation of a specific issue that is critical to the further development or adoption of policy, technology, or practice in one of the following areas:

- Reducing the environmental footprint of fossil energy exploration, extraction and processing;
- Alternative and renewable energy technologies;
- Energy efficiency and conservation technologies;
- Improved management of energy-related greenhouse gas emissions;
- Policies and practices leading to solutions for energy-environment challenges.

The interdisciplinary scope of CSEE permits a wide variety of proof of principle project types that can address this objective. Examples include:

- Refining and implementing designs or technologies;
- Verifying applications of technologies or policy frameworks through case studies;
- Field studies to assess the viability of a new technology;
- Laboratory tests for a new scientific or engineering approach to assess its performance;
- Development of novel risk assessment methodologies;
- Developing a risk communication strategy for new energy technologies;
- Addressing issues of scalability

A proof of principle project must have a clear evaluation and outcome that would enable a go/no go decision on further investment in the idea that was investigated.

Applications will be made using the CSEE Proof of Principle Funding Application. Proposals will be evaluated on the extent to which they effectively:

- explain why the specific issue proposed for investigation is important as to whether a technology, policy, or practice can advance to the next stage of adoption or development;
- outline the basic elements of a test plan, showing how it will achieve the proof of principle and defining what would constitute success or failure;

- involve external partners (government, industry, or NGOs) as participants, where applicable, and discuss their roles and responsibilities;
- address how the study will build value in a technology, or develop policy and practice, that would mitigate environmental impact of energy development, exploration, or use;
- outline the follow-on steps that would be undertaken at the conclusion of the proposed project, in the case of a successful outcome; and
- demonstrate that the work can be completed within a one-year timeframe.

Proof of Principle funding cannot be used as bridging or emergency funding, or to support ongoing studies.

### **Applicant Eligibility**

Full-time continuing faculty members from the University of Alberta, the University of Calgary, and the University of Lethbridge are eligible to apply for CSEE Proof of Principle funding.

### **Selection of Projects to be Funded**

An adjudication committee will consist of four individuals outside of the three CSEE partner universities, who have experience in research, development, and policy initiatives in one or more of the competition's theme areas. The committee will review project proposals in two separate classes: i) those requesting \$50,000 or less; and ii) those requesting more than \$50,000 to a limit of \$100,000. The Director of the University of Alberta's School of Energy and the Environment (SEE), and the Executive Director of the University of Calgary's Institute for Sustainable Energy, Environment and Economy (ISEEE), will both serve as non-voting, advisory members on the adjudication committee.

Multi-year awards for the same project will not be considered.

### **Administration**

The funding will be administered through the home institution of the successful applicant, and is subject to standard Tri-Council procedures and regulations. NSERC and CIHR guidelines will govern eligibility of expenses.

### **Decisions**

The CSEE web site will list the total number of proposals submitted for each competition. For funded proposals, the CSEE web site will provide the title, principal investigator(s), abstract, results (upon completion), publications, and any follow up activities.

### **Reporting**

Researchers of funded projects will submit a 2-page report of their outcomes and intended next steps (if any) to the Proof of Principle Program secretariat within 3 months of the completion date of the project. These reports will factor into support for future decisions on similar projects.