

PROJECT PROPOSAL

1. **Project name: Increasing Impact of Private Sector Supply Chain Energy Efficiency Efforts through ISO 50001**

2. **Two-year budget: C\$500,000**

3. **Short statement on the need identified (including current status), the project objective and the outcomes (achievable by June 2019) to address it:**

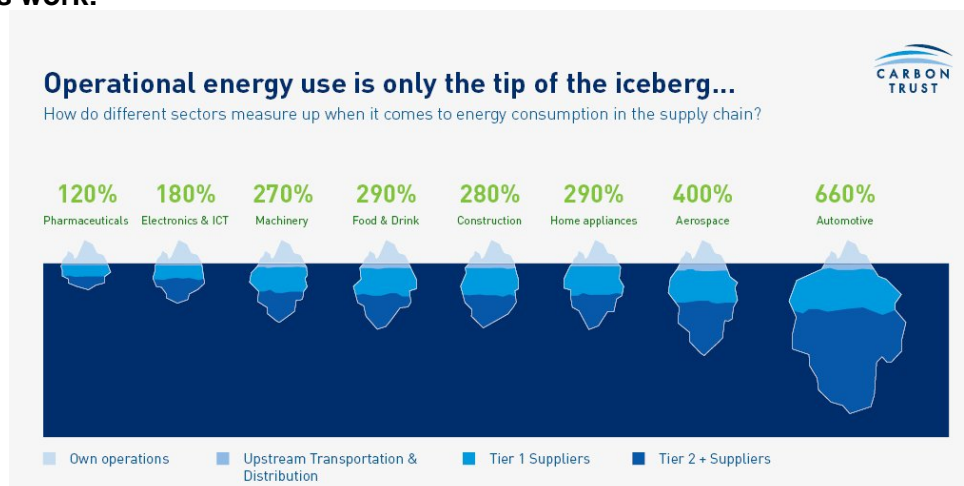
This project's goal is to promote greater energy efficiency in the industrial sector in North America, by promoting widespread adoption of the ISO 50001 international standard in industrial supply chains. While a previous CEC project has helped companies accept ISO 50001 as a key strategy for their own operations, few original equipment manufacturers (OEMs) in the region have integrated ISO 50001 in their supply chains. Working closely with OEMs and suppliers, in key sectors (e.g. automotive, food/beverage, home appliances) this project will pilot an ISO 50001 supply chain deployment model, resulting in approximately 20 supplier facilities reporting significant and measurable economic, energy and GHG benefits from implementation. Project results will also create the foundation for increased national program deployment of ISO 50001 as a supply chain solution. Results will be benchmarked against a facilities own energy use baseline normalized for key variables such as weather and production to ensure a robust assessment of energy and carbon impacts from ISO 50001 implementation. Overall project results are difficult to estimate because they will be dependent on a number of characteristics of project pilot facilities (e.g., size, age of facility, current energy efficiency practices, etc.) but we expect participating facilities to see an average of 5–10 percent improvements in energy performance or more from ISO 50001 implementation.¹

4. **Select the strategic priority(ies) that the project addresses:**

2015–2020 Strategic Priorities		Priority Areas	
X	Green Growth	X	Trade and the Environment

¹ Case studies have demonstrated the clear business value of implementing energy management systems, showing energy performance improvements of 10 percent and more. <http://www.cleanenergyministerial.org/Our-Work/Initiatives/Energy-Management/Case-Studies>

5. Explain how the project can achieve more impact by working trinationally, and why the CEC is the most effective vehicle to undertake this work:



Tackling supply chain–related energy efficiency and costs will not only help regional companies maintain a competitive global edge, but also will produce significant environmental benefits. (See Figure above.) However, greater coordination among the region’s national governments will be needed to engage continental supply chain partners. CEC plays a critical role as neutral broker in bringing together key project partners representative of the entire region. CEC support for this proposal will ensure equal access to project opportunities for companies from all three countries, and facilitate critical coordination among national program staff.

6. Describe how the project may capitalize on, or advance, the relationship between ecosystems, job creation, gender impacts, and income generation:

Sustainable energy use is central to sustainable development’s affecting communities, countries and people, through support for key societal functions such as health, education, economic growth and employment.

The ISO 50001 international energy management system standard is a key tool for sustainable energy, production and consumption. Analysis shows that implementation of ISO 50001 across the commercial and industrial sectors globally could drive cumulative energy savings of approximately 62 exajoules by 2030, saving over \$600 billion in energy costs and avoiding 6,500 Mt of CO₂ emissions. The projected annual emissions savings in 2030 are equivalent to removing 215 million passenger vehicles from roads.²

² Clean Energy Ministerial, Energy Management Working Group. Global Analysis of ISO 50001 Potential, 2016, <<http://www.cleanenergyministerial.org/Our-Work/Initiatives/Energy-Management/ISO-50001-Global-Impact>>.

7. List the objectives and activities to be conducted to achieve measurable results:

Objectives (must be SMART ³)	Main activities to achieve objectives (by 30 June 2019)	Measurable results
By June 2019, increase regional integration of ISO 50001 into supply chain strategies in at least one major economic sector	<ul style="list-style-type: none"> • Development of a suite of materials outlining the business case for engaging supply chain on ISO 50001 • Develop draft model supply chain program for ISO 50001 deployment • Provide access to tools, resources and local experts to facilitate implementation • Outreach, engagement and recruitment activities, including webinars, workshops, follow-up conference calls with individual companies and regional trade, economic-sector and private-sector associations 	<ul style="list-style-type: none"> • Increase in number of OEMs integrating ISO 50001 into supply chain sustainability strategies • Increase in number of companies from key sectors participating in national ISO 50001 programs • Increase in number of ISO 50001 certifications in key sectors. Increase in energy savings and decrease in greenhouse gas emissions
By June 2019, expand ISO 50001 supply chain experts and services availability in all three countries	<ul style="list-style-type: none"> • Engaging national experts as well as youth (through universities and colleges specifically) in the development of project materials and in outreach activities leverage expertise in project deployment. • Provide training for additional group of experts on integrating ISO 50001 into supply chain sustainability strategies 	<ul style="list-style-type: none"> • Increase in trained and certified ISO 50001 professionals • Increase in demand for ISO 50001 expert services in all three countries • Increase number of university engineering students with knowledge and skills in energy efficiency and ISO 50001
By June 2019, support approximately 20 regional supply chain partners in implementing the requirements of ISO 50001 & reporting results	<ul style="list-style-type: none"> • Deliver technical assistance pilot program for ISO 50001 in the supply chain for a group of companies in all three countries 	<ul style="list-style-type: none"> • Increase in energy savings and decrease in greenhouse gas emissions • Increase in companies from key sectors participating in ISO 50001 programs • Increase in number of ISO 50001 certifications in key sectors

³ SMART: Specific, measurable, achievable, realistic and time-bound.

8. Describe how the project complements or avoids duplication with other national or international work:

- National: This project would be led by and coordinated with national government programs to promote ISO 50001 and energy efficiency in the industrial and commercial sectors. Thus, this project would be well integrated with the work of a wide range of partners involved at the national and subnational levels, to support national government program implementation.
- Regional: This proposal would help fulfill high-level regional commitments announced at the 2016 North America Leaders' Summit and North America Energy Minister's meeting. In addition to piloting a supply chain effort, North America leaders committed to setting a regional target for ISO 50001 adoption positioning ISO 50001 as a key energy efficiency strategy for all three countries.
- International: This project would be conducted in close coordination with the Energy Management Working Group (EMWG) initiative. EMWG was launched in 2010 by the Clean Energy Ministerial (CEM) and the International Partnership for Energy Efficiency Cooperation (IPEEC). Through the EMWG, government officials worldwide share best practices and leverage their collective knowledge and experience to create high-impact national programs that accelerate the use of energy management systems in industry and commercial buildings. *Canada, Mexico, and the United States* are key partners in EMWG's work, including in a global campaign to recruit private-sector commitment to implement ISO 50001—the Energy Management Campaign. Private-sector leaders involved in this proposed project, therefore, have the additional incentive of receiving international recognition for their actions. This could motivate them to consider implementation of ISO 50001 beyond their North American facilities, extending to their global carbon footprint.

9. Describe opportunities for inclusion of traditional ecological knowledge (TEK), if applicable, and how these opportunities are incorporated into the project :

Not applicable

10. Describe opportunities for youth engagement, if applicable, and how these opportunities are incorporated into the project:

The project will provide opportunities for youth engagement through engineering universities, where students can engage in the technical aspects of ISO 50001 implementation. This engagement can be modeled on the US program where 26 engineering universities provide local industry with energy efficiency support, resulting in raised youth capacity and awareness of energy environmental issues.

11. List significant involvement of other levels of government, Indigenous groups, local communities, experts, private sector, civil society and others, as applicable:

- Private Sector: Major multinational corporations in the manufacturing sector are the primary targets through this project. A previous phase of this work through CEC engaged nine multinational corporations to implement ISO 50001 at 19 of their facilities; progress through this project is building a business case to expand ISO 50001 to their supply chain.
- Experts: Experts engaged, trained and certified by the previous CEC project will be re-engaged in this project as part of continued capacity building of national ISO 50001 experts.
- Other: This project will also engage local communities and civil society, including, but not limited to, accreditation, certifications and standards bodies (American National Standards Institute, ANSI-ASQ National Accreditation Board, *Entidad Mexicana de*

Acreditacion, Standards Council of Canada); manufacturing trade associations; and utilities and other energy efficiency–incentive providers.

12. Identify relevant committee members and their federal agencies in each country committed to developing this project, and implementing it, if approved:

Canada: Bob Fraser, Natural Resources Canada; Mexico: Israel Jáuregui Nares, Noé Villegas Alcántar, Sergio A. Segura Calderón, CoNUEE; United States: Paul Scheihing, Lindsay Parker, Graziella Siciliano, DOE

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