

# Evaluation of the Clean Energy Innovation Research Centre

October 27, 2025

## About the research centre

The Clean Energy Innovation Research Centre (CEI), formerly the Energy, Mining and Environment Research Centre, was established in 2012. It is 1 of 12 research centres at the National Research Council of Canada (NRC) and aims to accelerate Canada's transition to a thriving net-zero economy built on clean energy and decarbonized industries.

CEI's research and development (R&D) activities are focused through 2 internal programs, Advanced Clean Energy (ACE) and Industrial Carbon Management. It also leads the Materials for Clean Fuels Challenge program and the Critical Battery Materials Initiative, which is part of ACE.

## Key findings

### Achievements and outcomes

CEI is advancing research and technology in Canada's clean energy sector. Its publications exceeded targets and received higher than global average citation scores within the research centre's 4 thematic areas: fuel switching, electrification, hydrogen and carbon management. CEI supported clients by reducing risks and start-up costs associated with launching technological innovations. It contributed to progress on Canada's net-zero emissions goals by advancing the development, demonstration, commercialization, and adoption of low-carbon fuels and battery storage technologies. The research centre has also supported the development of government policies and standards, specifically in hydrogen and energy storage, to further contribute to emissions reductions.

### Capabilities

CEI possesses the expertise and organizational culture required to achieve its strategic goals. However, some challenges with human resource utilization, recruitment and succession planning were identified. Workforce diversity was generally strong, with some opportunity to improve the representation of Indigenous peoples, persons with disabilities, and women in research and technical roles. CEI's facilities met client needs, but some issues related to duplication and underutilization were identified. Soon-to-sunset programs, anticipated federal budget reductions, and an overreliance on revenues from other government departments pose a significant risk to the research centre's operations.



## Finances (fiscal year 2023–24)

Budget: \$26.8 million

Revenues: \$11.4 million

Expenses: \$37.8 million



## Resources (as of March 31, 2024)

Research centre staff: 235

(82% are research and technical officers)



## Key collaborators

CEI collaborates with most NRC research centres, other government departments, industry and academia. It is also involved in 2 collaboration centres with the University of Toronto and University of British Columbia.

## Relevance and engagement

CEI's new strategic focus improves its alignment with federal and NRC climate action priorities, enhancing its relevance. Collaborations with key stakeholders in the clean energy ecosystem have generally been effective, with some opportunities to strengthen relationships with industry. The research centre lacks a strong identity within the clean energy ecosystem. While its value proposition at the program-level is generally well-defined, it lacks clarity at the research centre-level. Challenges with CEI's client support and outreach were also identified.

## Future outlook

CEI is well-positioned to take a leading role in Canada's clean energy sector but must narrow its focus within its thematic areas in order to maximize its impact. According to an external expert peer review committee, this can be achieved by concentrating on specific research activities where Canada can add unique value. Furthermore, by establishing deeper relationships with key players in the clean energy ecosystem, CEI can enhance its contribution to global innovation and help Canada to achieve its climate action goals.

## Recommendations

In order to be best positioned to achieve its strategic objectives CEI should:

1. Streamline its thematic areas to focus on activities within which it can have maximum impact. This should include:
  - clearly defining its unique value proposition within the clean energy sector
  - re-examining the composition of research teams to ensure they have the required expertise and critical mass
  - reviewing facilities and equipment to determine the extent to which they are mission critical
  - streamlining activities to concentrate on fewer areas of greater impact
2. Develop a human resources plan that assesses staffing options for recruiting new staff. This should include ensuring that key research and technical positions are adequately filled by indeterminate employees.
3. Refine its approach to collaborations, establishing itself firmly as a convener of key ecosystem players. This should include identifying the optimal approach for collaborations with academia, and enhancing business development, client support and management activities.
4. Enhance impact measurement by implementing a tool to more systematically measure CEI's impact on decarbonization and GHG emissions reduction and promoting the adoption of this tool by other NRC research centres.

## About the evaluation

The evaluation covered the period from fiscal years 2017–18 to 2023–24 and was conducted in line with the NRC's evaluation plan and the Treasury Board's Policy on Results. It examined CEI's progress toward outcomes and the extent to which it is positioned to achieve its strategic objectives. A mixed-methods approach was used, including document and data review, bibliometric analysis, interviews, case studies and an expert peer review.

Visit the [evaluation page](#) on the NRC's website to access the full evaluation report.