

Items for the Information of the Partners in Project Green Executive Management Committee

TO: Chair and Members of the Partners in Project Green Executive Management Committee
Tuesday, April 14, 2026 Meeting

FROM: Darryl Gray, Director, Education and Training

RE: **EARTH DISTRICT AND TRCA PARTNERSHIP**

KEY ISSUE

High-level overview of Earth District, summarize the Toronto and Region Conservation Authority (TRCA) Earth District Memorandum of Understanding (MOU), and outline strategic collaboration pathways.

RECOMMENDATION:

IT IS RECOMMENDED THAT the report on the Earth District and TRCA partnership, be received.

BACKGROUND

Earth District is a consortium of five Ontario post-secondary institutions dedicated to sustainable innovation and environmental technologies. These institutions are: Centennial College, Fleming College, Ontario Tech University, Trent University, and University of Toronto Scarborough.

Earth District serves as a regional movement uniting academia, industry, government, Indigenous communities, and research funders to develop clean technologies, prototype solutions, and train the next generation of environmental leaders. The consortium engages in large-scale applied research including sustainable mobility, clean energy systems research, and cross-sector innovation projects.

On May 2, 2025, TRCA and Earth District formalized their partnership via an MOU enabling joint research, internships, curriculum collaboration, and shared site access for programming, demonstration, and applied fieldwork.

Earth District is already engaged in large-scale applied research and innovation initiatives, including:

1. Sustainable Mobility & Rail Electrification

In 2023, the Earth District consortium signed an MOU with Alstom, the global leader in electric rail systems, to support:

- Research and development for sustainable mobility;
- The first Canadian rail specialization in engineering through Alstom University;
- Joint projects in electrification of regional rail and climate-aligned mobility;
- Experiential learning (co-ops, internships, capstones) for students across all partner institutions; and
- Technical challenge initiatives supported by Alstom experts.

2. Clean Technology & Sustainable Energy Systems

Earth District institutions collaborate on applied research through the EaRTH District Collaborative Research Grant (EDCRG) program, which supports projects in:

- Sustainable energy technologies;
- Low-carbon systems;
- Cleantech commercialization;
- Industry–academic pilot demonstrations; and
- Leveraging facilities like Trent University’s Cleantech Commons innovation park for R&D–industry interface.

3. Environmental Solutions & Circularity

The consortium’s mission explicitly includes low-carbon and sustainable technologies applicable to:

- Construction;
- Transportation;

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- Housing;
- Resource management; and
- And offers sites and partners for field testing and demonstration..

RATIONALE

The TRCA–Earth District MOU strengthens and elevates TRCA’s role as a regional leader in conservation science by integrating academic research, applied innovation, and experiential learning opportunities. The partnership aligns with TRCA’s mandate to advance climate resilience, watershed management, green infrastructure, biodiversity research, and low- carbon technology adoption and potential future collaboration areas include:

- **Applied Research & Demonstration:** Utilize TRCA sites for field testing, monitoring, and demonstration of clean technologies and LID solutions.
- **Workforce Development:** Expand internships, co- ops, and student placements supporting TRCA projects in ecosystem monitoring and climate adaptation.
- **Joint Grant Development:** Pursue joint funding for climate resilience, biodiversity, and sustainable mobility initiatives.
- **Innovation Ecosystem Integration:** Connect Earth District’s research capacity with TRCA’s operational needs to advance clean technology deployment.

The first collaboration under the MOU was the May 2, 2025 “*Decarbonizing Buildings: What’s Holding Us Back?*” event co-hosted by Earth District and Partners in Project Green, which produced a public report synthesizing barriers and actions to advancing broader efforts towards decarbonization of buildings and building operations. This report can be found here: <https://partnersinprojectgreen.com/resources/decarbonizing-buildings/>.

Relationship to TRCA’s 2023-2034 Strategic Plan

This report supports the following Pillars and Outcomes set forth in TRCA’s 2023-2034 Strategic Plan:

Pillar 2 Knowledge Economy:

2.1 Research and development that drives innovation and climate-

based solutions

Pillar 2 Knowledge Economy:

2.2 Collaboration to advance a green transition

DETAILS OF WORK TO BE DONE

There are five key areas of collaboration and ongoing work being undertaken jointly between TRCA and Earth District. These include:

Advance Joint Research & Demonstration: Align TRCA priorities with Earth District research strengths to initiate applied projects using TRCA sites.

Expand Workforce Development: Grow internships, co-ops, and student placements supporting TRCA climate and ecosystem programs.

Pursue Joint Funding: Collaborate on grants that support climate resilience, biodiversity, clean energy, and sustainable mobility initiatives.

Integrate Innovation Ecosystems: Connect Earth District researchers and industry partners with TRCA operational needs to accelerate clean-tech adoption.

Mobilize Knowledge: Co-develop and share reports, events, and findings that support regional climate action and TRCA strategic objectives.

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