

# INNOVATE WITH COSIA

When opportunity knocks, will you answer?



[Visit the innovator section of our website](#)

Canada's Oil Sands Innovation Alliance (COSIA) is a leader in open-source innovation, developing clean technologies to improve environmental performance in the oil sands in the areas of greenhouse gases (GHGs), land, tailings and water. This innovation has potential application to other industries in Canada and other countries, delivering made—in—Canada benefits to others worldwide.

 [DISCOVER MORE ABOUT COSIA](#)



**\$1.8B**

IN TECHNOLOGY  
DEVELOPMENT\*

**1143**

CONTRIBUTED  
TECHNOLOGIES\*

**\$531M**

IN PROJECT  
INVESTMENTS

**233**

ACTIVE  
PROJECTS

\*Numbers are cumulative since 2012

COSIA is an alliance of oil sands producers focused on accelerating the pace of improvement in environmental performance in Canada's oil sands through collaborative action and innovation. We bring together leading thinkers from around the world, including industry, government, academia and the public, all working to decrease emissions, reduce water usage and reclaim land faster.

The results are evident. For example, COSIA in situ operators have reduced freshwater use by 46 percent, and members have reduced the operating footprint intensity of in situ operations by 6 percent since 2012.



For more information:



[Review our current Research Reports](#)



[Check out our latest Annual Report](#)

## INNOVATION OPPORTUNITIES



### GREENHOUSE GASES (GHG)

**Natural Gas Decarbonization:** Reduce CO2 emissions from in situ operating facilities

[VIEW INNOVATION OPPORTUNITY](#)

**Post Combustion Capture Process:** Technologies and processes that can be economically applied to current oil sands production.

[VIEW INNOVATION OPPORTUNITY](#)



### LAND

**Zero Land Disturbance Exploration:** New research or technologies that would enable in situ oil sands operators to conduct below ground exploration with zero or limited impact to surface land.

[VIEW INNOVATION OPPORTUNITY](#)



### TAILINGS

**Clay Chemistry Impacts on Permeability and Consolidation of Fines-Dominated Deposits:** Technologies that alter the bulk and surface properties of oil sands clay minerals to effect a beneficial behavioural change in tailings.

[VIEW INNOVATION OPPORTUNITY](#)

**Capping of Tailings Deposits:** Refine existing methods and best practices and develop novel techniques for stabilization, capping and reclamation of tailings ponds.

[VIEW INNOVATION OPPORTUNITY](#)



### WATER

**Passive Treatment Technologies:** Developing low—energy technologies that can treat dissolved organics in Oil Sands Process Water (OSPW) and speed up self-remediation through natural processes.

[VIEW INNOVATION OPPORTUNITY](#)

**New Water Treatment Technologies:** Develop more efficient and cost—effective technologies to remove dissolved solids (e.g. organics, silica, magnesium, calcium) from Oil Sands Process Water (OSPW) so it can be converted to steam and used in extraction.

[VIEW INNOVATION OPPORTUNITY](#)

Learn about research already completed or underway in our [Research Reports](#), found on the Innovation Opportunities section of [COSIA's innovation hub](#).

## INNOVATION OPPORTUNITIES & RESEARCH REPORTS

COSIA's Innovation Opportunities represent possibilities that, if realized, will contribute to the improvement of environmental performance in the oil sands in the areas of greenhouse gases (GHG), land, water and tailings.

Opportunities include research and technology needs, from incremental—because the small things add up—to game—changers with the potential to propel industry forward.

## SUBMIT YOUR IDEAS AND TECHNOLOGIES

Innovators come from all walks of life. You may be an academic, researcher, inventor, entrepreneur, or otherwise, we want to hear from anyone with an idea or potential innovation.

After all, you never know from where the next great idea will come.

When submitting an idea for consideration, we'll ask you for enough technical details that COSIA's members can make an informed decision on the value of your innovation. But COSIA will never ask you for intellectual property information. That's a later discussion between you and a member company if your submission progresses to that stage.

COSIA reviews all submissions received through our Environmental Technology Assessment Portal (E—TAP). We may ask for more information to clarify your submission, or schedule a follow up discussion. To find out more about how our submission process works, visit the [E—TAP page](#) on [www.cosia.ca](http://www.cosia.ca) and see the [E—TAP Submission Guide](#).

## WE'RE WORKING TO HELP CANADA BECOME A GLOBAL LEADER IN CLEAN TECHNOLOGIES FOR OIL PRODUCTION.

Check out a few examples of exciting projects members are leading through COSIA.

[XPRIIZE Video Link](#)

[GHGSat Video Link](#)

## Questions? Need more information?

[Contact Kerri Romanetz](#)

## Stay In Touch!

[Sign up to receive COSIA news](#)

[Tune into our podcast series Innovative Minds](#)

