

What is IPAC-CO₂?



The Government of Saskatchewan and Royal Dutch Shell have contributed founding investments of \$5 million each toward establishing a centre that will help make western Canada and a network of international experts leaders in the large-scale deployment and acceptance of Carbon Capture and Storage (CCS) internationally.

Managed from the University of Regina, the new centre is called the International Performance Assessment Centre for Geologic Storage of CO₂ (IPAC-CO₂).

IPAC-CO₂ will assess and advise on CCS projects around the world and share findings with other research organizations.

IPAC-CO₂ is an independent, credible and non-aligned organization that addresses the growing demand for expertise in sub-surface reservoirs for the geological storage of CO₂.

In addition to evaluating performance and risk issues and assessing proposed projects, IPAC-CO₂ will:

- Network internationally to share and build on the findings of other academic and public organizations and institutions with CCS expertise;
- Interact with key stakeholders to identify emerging issues and ensure effective and acceptable risk assessment techniques are developed, applied and communicated;
- Create communications to inform the public and build broad acceptance of CCS;
- Develop a pool of qualified personnel in the areas of performance and risk assessment.



What Will IPAC-CO₂ Do?

The goal of IPAC-CO₂ is to contribute to international capacity building on CCS by providing and further developing the expertise that underpins the policies and regulations required for the large-scale deployment of CCS.

As well, it will assist in establishing CCS as an internationally recognized method of CO₂ mitigation and as a compliance option in domestic and international GHG regulatory frameworks.

The launch of IPAC-CO₂ at the U of R is a natural extension of the energy and environment research programs undertaken at the university over the past 20 years.

Given its internationally-recognized expertise in CCS and environmental technologies, for example, its participation in the IEA GHG Weyburn-Midale CO₂ Monitoring and Storage project, the U of R will act as the centre host and project manager for research and assessment work.

IEA GHG Weyburn-Midale CO₂ Monitoring and Storage Project is the world's first CO₂ measuring, monitoring and verification initiative based on enhanced oil recovery. Launched in 2000, this \$80 million international project studies CO₂ injection and storage underground in mature oil fields.

The goal of the project's Final Phase (2007-2011) is to deliver the framework necessary to encourage implementation of CO₂ geological storage on a worldwide basis.

International Test Centre for CO₂ Capture



A Global Need For Energy

The world faces the daunting combination of surging energy demand, rising greenhouse gas emissions and tightening resources concluded the International Energy Agency (IEA) in its latest edition of Energy Technology Perspectives.



The Agency's leading biennial publication responded to the G8 call on the IEA for guidance on how to achieve a clean, clever and competitive energy future.

Energy Technology Perspectives said Carbon Capture and Storage, renewable

and nuclear energy as well as energy efficiency all must play a much more important role.

A new insight from the IEA study included recognition of the important role for CCS in industry.

It's clear, more than ever, that the world needs CCS.



The CCS Solution

There are a number of solutions to the global energy-climate change challenge.

However, the large volume of GHG emission reductions that could be realized through CCS make this technology the most essential solution to address climate change in the near future.

Climate change is a global problem that requires global solutions. IPAC-CO₂ will go beyond international borders to work with, and build on, the best CCS research available around the world.

The work IPAC-CO₂ will do is different from the academic research on CCS risk assessment that has been going on for years.

IPAC-CO₂ will become an expert institution that supports and facilitates international capacity building on CCS.



More Funders Required

There's no doubt CCS is a complex GHG mitigation option.

More work is required to help reduce costs and ensure safe, effective and efficient deployment of CCS.

There is an opportunity for more private and public

sector investment to ensure IPAC-CO₂ has the support and expertise needed to sustain its growth, remain well funded in the future and help deploy CCS technology worldwide.



Contact Information

For more information on how to become involved in this leading-edge centre, contact Malcolm Wilson at the University of Regina today!

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Join IPAC-CO₂!

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