



CeDER Overview

CeDER is a Saskatchewan-based mobile test and verification facility established by SRC that provides real-world testing, demonstration and verification of emissions reduction technologies. Designed to accelerate industry adoption of practical and economic GHG reduction technologies, CeDER offers independent, industry-recognized, third-party certification.

Why Industry Needs CeDER

Government energy regulators are demanding substantial greenhouse gas (GHG) reductions from industry in the next five years. While CO₂ is a major concern, there is an increased need to focus on and address the large methane emissions from the oil and gas sector. Industry is seeking effective and scalable new commercial technologies that can be used to reduce their emissions in line with emerging regulations. GHG technology developers need a lower cost and accelerated route to validate and commercialize their emissions reduction technologies.

CeDER Services

CeDER addresses these industry and technology provider needs through a credible, fee-for-service and low-cost platform for field-scale testing of emissions reduction and capture technologies. Building on SRC's expertise and experience in the

oil and gas sector, CeDER is focused on methane emission reductions for this sector. CeDER can test and validate emissions technologies for low and high-volume sources, from fugitive to process venting to large plants.

While the focus is on methane, CeDER can test, verify and demonstrate new GHG emissions-reducing technology:

- Methane (CH₄)
- Carbon dioxide (CO₂)
- Hydrogen sulfide (H₂S)
- Mono-nitrogen oxides (NO_x)
- Sulfur oxides (SO_x)

**Low-Cost, Rapid, Stage-Gated,
Quick-to-Fail, Fast-to-Market**

CeDer

Centre for the Demonstration
of Emissions Reductions

CeDER Capabilities

- Fully GHG emissions capable with a specific focus on methane emissions reduction technologies
- Emissions testing from industrial sources, including oil and gas, energy, petrochemicals and agriculture
- Technologies tested and validated at levels less than 200 SCFD to greater than 1.5 MMSCFD, including capture or conversion technologies for fugitive, venting, flaring and large-scale emissions
- Wide range of technologies can be tested

CeDER field units are trailer mounted and mobile, capable of moving easily from one field location to another. CeDER is designed to monitor, measure and validate the mass-energy inputs and outputs of the GHG technologies under test, as well as internal and nearby gas emissions (as required) by the test protocols.

CeDER Services and Locations

CeDER is a fee-for-service, low-cost validation platform for new GHG control technologies in a field environment. SRC has designed the CeDER unit and services to be easily accessible by both technology providers, funders and partners. The unit is mobile and can operate not only in Saskatchewan, but in field locations across Western Canada, as required by the customer.



Ceder PROCESS

GHG TECHNOLOGY

EVALUATION

Quick and efficient engineering and safety health check

TESTING

Access to test facility based on technology needs

VALIDATION

Rapid, independent, third-party assessment and validation

INDUSTRY ADOPTION

CeDER is equipped to test and validate most types of emission reduction systems, including:

Vapour Recovery/Treatment

Vapour Recovery Unit
Vapour Recovery Tower

Flare/Combust

Utility and Smokeless Flares
Incinerators

Capture/Convert

CNG/LNG/NGL
GTL
Gas to Power

Monitoring Systems

Static and mobile systems
UAV systems
LDAR programs