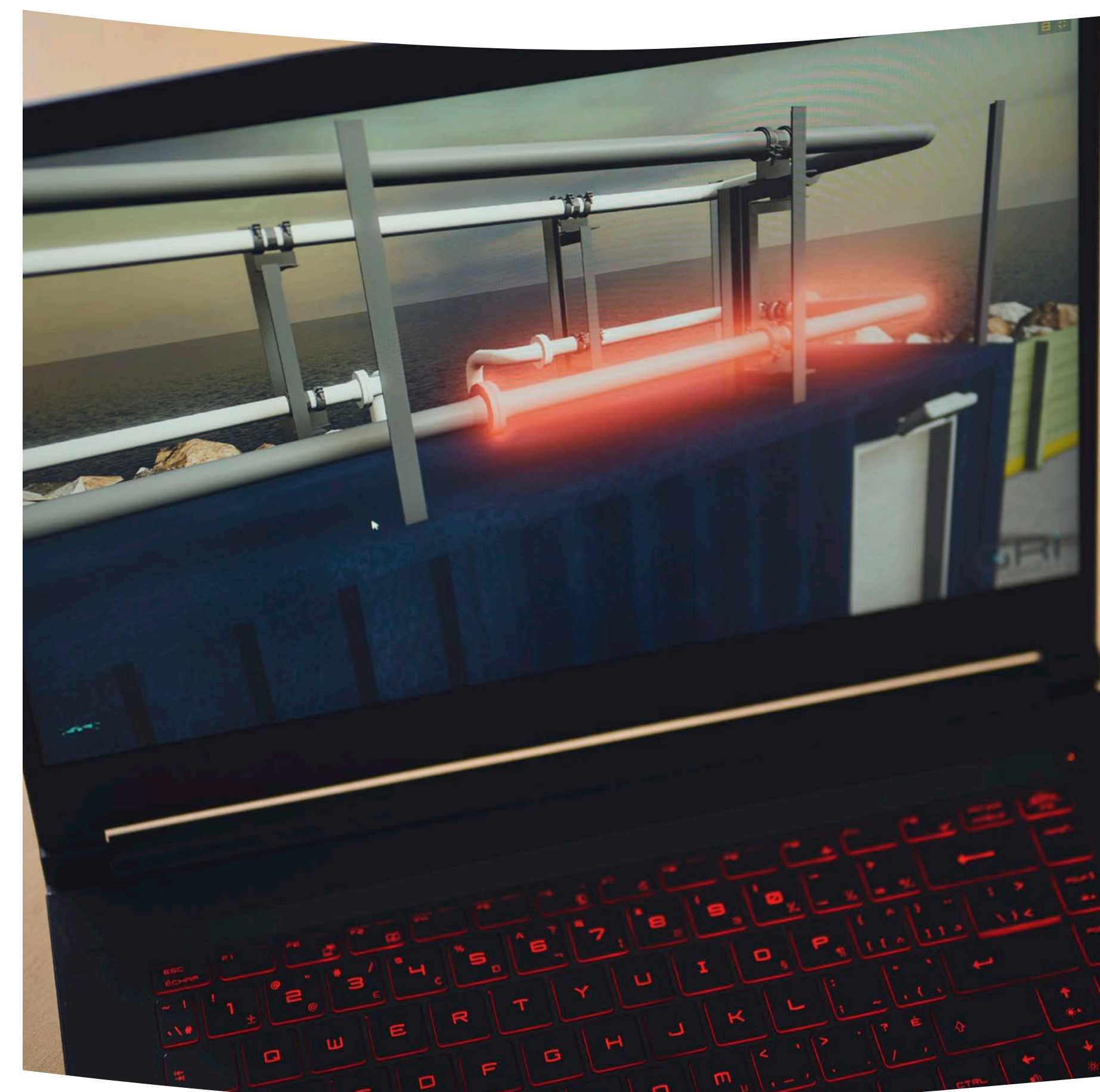


# Sustainable Emissions Reduction by Digital Integrity Management (SERDIM)

## Summary

Target Emission Source: **Flaring, Fugitive Emissions, Power Generation, Transportation**  
 Emission Reduction Strategy: **Operational Optimization**  
 Project Type: **Research, Development and Demonstration**  
 Entry TRL: **4**  
 Target TRL: **8**  
 Field Trial Required: **Yes**  
 Projected Ready By: **2023**



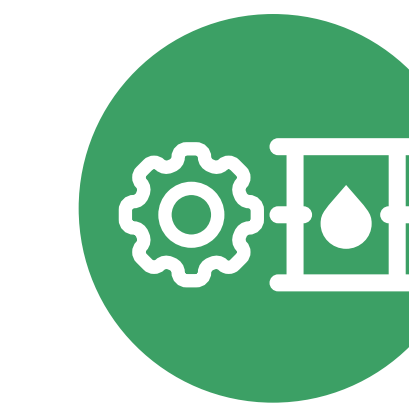
## The Project

Copsys Intelligent Digital Skin (CIDS) is a new coating-based (paint) digital sensor technology that could transform existing corrosion and integrity management systems. Developed by Copsys Industries Inc and led by Suncor, this project tested and advanced CIDS technology and its ability to replace predominantly labour-intensive piping inspection processes to detect and manage corrosion under insulation. The project conducted extensive industry testing on the coating as well as implemented an industry demonstration combined with digital twin.

## Benefits



CIDS has the potential to reduce greenhouse gas emissions by reducing the frequency of production upsets, resulting in decreased flaring, a reduction in the likelihood of fugitive emissions



Technology could be used in oil and gas production and transportation as well as other industries.

## Opportunities & Next Steps

Seeking industry partners and funding for a larger scale demonstration/field trial of the CIDS coating system with digital twin on an oil and gas processing facility

Pursuing further regulatory and industry standard certification in preparation for market commercialization in 2022+