

# Carbon Capture & Storage (CCS) Data Services



Integrated data solutions to support your CCS information goals

Carbon capture and storage (CCS) presents a complex challenge in terms of gathering, storing, and accessing the diverse array of data associated with its implementation. The data required for CCS projects encompasses a wide spectrum, including geological, engineering, environmental, and economic information.

## GATHERING

The volume and variety of data generated from various stages of CCS projects, including capture, transport, and storage, present a challenge. Different sources and technologies across the multiple stages result in a wide array of data formats and standards, complicating the integration and standardisation of information.

## STORING

Storage of vast datasets requires sophisticated infrastructure, including secure and scalable storage solutions, to prevent data loss or corruption. Ensuring data security and privacy is crucial. Data governance and Stewardship practices need to be developed to align with company culture.

## ACCESSING

Establishing standardized protocols for data access and sharing across internal teams and with external stakeholders is essential for maximizing the potential benefits of CCS technologies and fostering collaboration. Quickly finding trustworthy data is a key enabler to making timely data driven decisions

## WHY CCS DATA?

A structured approach to data management from the beginning of a project provides benefits that will compound over time. If the importance of data is realized later in the project cycle it is possible to develop a point forward solution leveraging existing systems and addressing historical shortfalls.



- Ease of collaboration across teams and functions
- Confidence in data quality for decision making
- Easy of onboarding new staff and suppliers
- Ease of access to data
- Auditable data for external reporting
- Reduced total system cost
- Security and privacy settings
- Clear data expectations of suppliers
- Data Literacy across Organisation

## SWORD'S CCS SOLUTION

Our experience across the five elements of the data service allows us to access your current state and help build and maintain the data system that will serve all CCS data users across the project's life:



### GIS

Visualization of all wells, facilities, pipelines and land ownership around the project.

Visualization of all sensors and monitoring during the decades of operation.



### SUBSURFACE

Data management practices for reservoir and wells data collected for the discovery, development and operation of the project.

Ability to accurately load old data for discovery and development. Aggregation, QC, Visualization and analysis of Real time.



### ENGINEERING

Engineering data model for the capture facilities, pipeline and injection facilities.

Ability to access all engineering docs and maintenance practices.

Information on all the sensors and meters.



### COMMERCIAL

Data Management of all regulatory and commercial documents with access controls.

Ability to scan and extract data from old paper and PDF documents.



### REPORTING

Secure and consistent data store for all operating and monitoring data.

Preparation of emissions reporting documents and audit trail of documents and compliance systems for regulators.

## OUR APPROACH

Understanding your specific needs and existing data management environment allows for the development of solutions that fit your culture, leverage your ecosystem and align with your budget. Sword have an assessment process that will address your platform, data and apps needs through their framework model.

Sword's 30 years' experience working with energy companies across all aspects of the business process positions us to support your needs.

We provide users focussed solutions with easy and reliable access to their data for decision-making and compliance reporting across previous discipline silos.

