Simplifying Data + AI so Energy Companies Can Drive Sustainable Innovation Faster

Data is at the core of nearly every innovation in the energy, oil and gas industry. Leading organizations are harnessing the power of data and analytics to solve strategic challenges and make smarter decisions that minimize risk, streamline operations and move us toward a net zero world.

Leading energy, oil and gas companies power innovation with Databricks

Reduced costs by millions through supply chain optimization and predictive maintenance of machinery
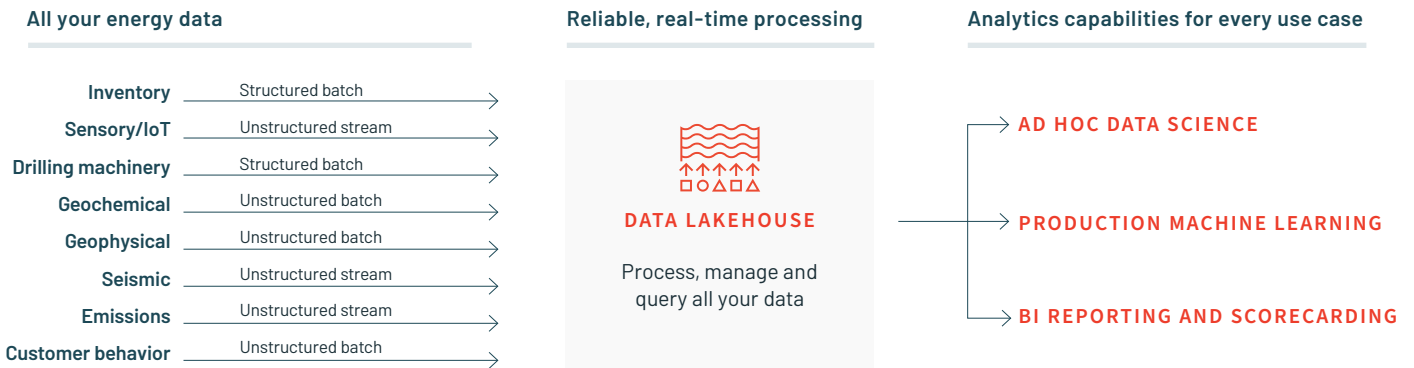
Increased oil and gas output through the analysis of various data types for more efficient mining

Delivered personalized energy management experiences for the connected home

Unlock the value of data lakes for BI and ML

Databricks provides a Lakehouse Platform that helps energy companies democratize data for downstream analytics and AI — streamlining operations and accelerating transformative and sustainable innovation.

All your energy data

Inventory	Structured batch
Sensory/IoT	Unstructured stream
Drilling machinery	Structured batch
Geochemical	Unstructured batch
Geophysical	Unstructured batch
Seismic	Unstructured stream
Emissions	Unstructured stream
Customer behavior	Unstructured batch

Reliable, real-time processing

DATA LAKEHOUSE

Process, manage and query all your data

Analytics capabilities for every use case

AD HOC DATA SCIENCE

PRODUCTION MACHINE LEARNING

BI REPORTING AND SCORECARDING

DATA CHALLENGE	THE DATABRICKS LAKEHOUSE FOR ENERGY
DATA INGEST: Processing batch and streaming data can be slow and error prone, impacting downstream analytics	Connect and process all your data — whether it's structured or unstructured, batch or streaming — for real-time insights
DATA LAKE MANAGEMENT: Data silos can limit the ability to gain a complete view of the user	Easily handle large volumes of data from multiple sources (sensor data, geospatial, customer, inventory, etc.) built on a strong privacy foundation
DATA QUERY: Fragmented, siloed and inconsistent data sources for BI and data science	From AI to BI, rapidly and inexpensively analyze, manage and model all your data in a single platform

Energy sector customers

BASF — We create chemistry · bp · Braskem · Chevron · CHESAPEAKE ENERGY · ConocoPhillips · devon

DNV·GL · ExxonMobil · KOMATSU · Shell · SIEMENS · thyssenkrupp · Quby · UTOPUS INSIGHTS

Common use cases in energy

Oil Exploration
Pinpoint oil reserves and better predict where to drill next by applying spatial data analytics and machine learning to large volumes of subsurface and reservoir data.

Production and Forecasting
Determine optimal oil extraction methods and accurately forecast production volumes by analyzing seismic, completion, drilling, well and production data.

Predictive Maintenance
Avoid production failures and downtime by analyzing real-time sensor data, maintenance schedules, and other historical data to predict equipment maintenance needs.

Supply Chain Optimization
Manage inventory levels more efficiently to reduce overall costs and downtime of machinery and equipment.

Smart Grid
Transform the energy value chain to enable a clean and sustainable energy distribution system.

Personalized Energy Management
Help consumers better manage home energy usage through smart thermostats and the connected home.

The Databricks Impact

Databricks helps companies automate infrastructure management, increase ETL performance at scale, and accelerate machine learning and analytics initiatives.

12x faster
ETL pipelines

Impact: Faster time-to-market for new analytics insights and models

+25%
gain in productivity

Impact: More productive data scientists result in more AI innovation

+47%
overall cost savings

Impact: Lower infrastructure costs boost operational margins

Learn more about our oil and gas solutions

DBRICKS.CO/ENERGY ›

About Databricks

Databricks is the data and AI company. More than 5,000 organizations worldwide — including Comcast, Condé Nast, H&M, and over 40% of the Fortune 500 — rely on the Databricks Lakehouse Platform to unify their data, analytics and AI. Databricks is headquartered in San Francisco, with offices around the globe. Founded by the original creators of Apache Spark™, Delta Lake and MLflow, Databricks is on a mission to help data teams solve the world's toughest problems. To learn more, follow Databricks on Twitter, LinkedIn and Facebook.