

Refined Efficiencies, Extensive Solutions

GULF CRYO OIL & GAS BROCHURE





EFFICIENT



RELIABLE



INNOVATIVE

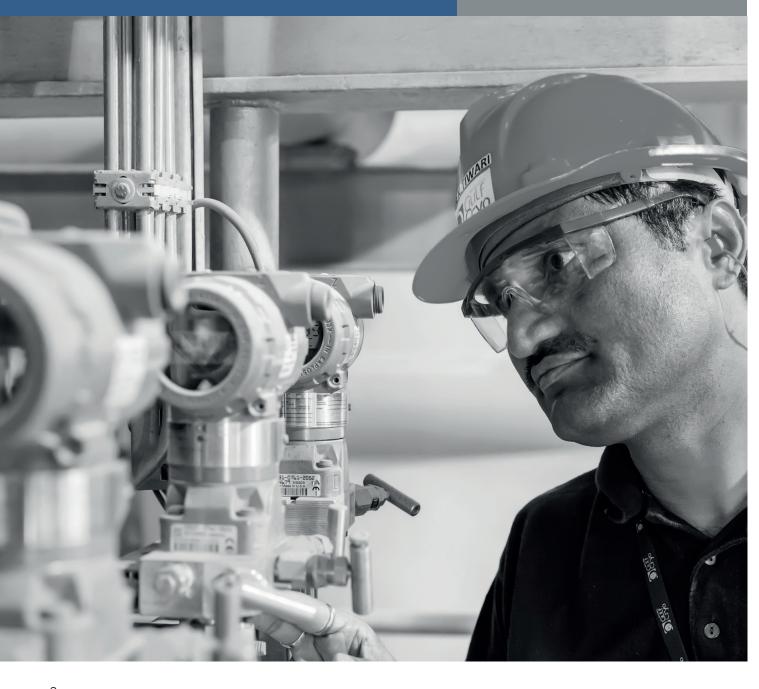


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A NEED FOR EFFICIENCY

The Middle East is abundantly endowed with oil and gas resources. However, the drive to improve efficiency, cost effectiveness and environmental stewardship has become a key driver in decision making.

HOW WE WORK WITH YOU

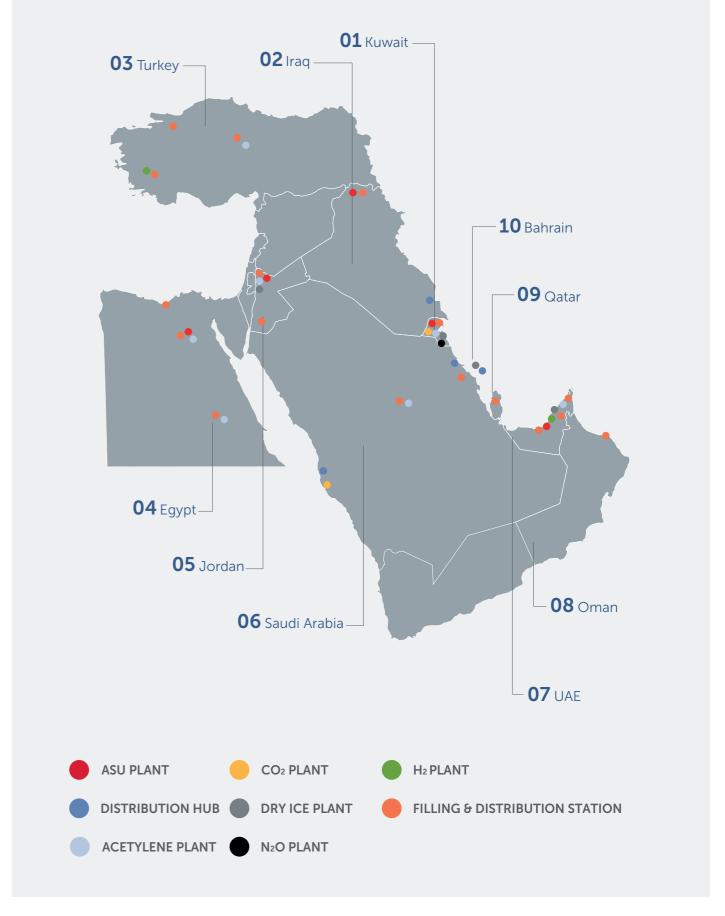
Gulf Cryo's dedicated technical team understands that finding an industrial gas partner willing and able to invest in plant, equipment and human resources is a must for any oil and gas company.

Gulf Cryo provides a full portfolio of products and services including on-site supply of gases as process feedstock, EOR solutions, on-site carbon capture, bulk gases for safety and maintenance, and packaged gases for analytical use and welding applications.

Our engineers can implement a total gas management service handling the operation and maintenance of gas plants, assuring a 100% guaranteed source of high-quality gases in the pipeline with an additional back-up bulk gas service.



REGIONAL LEADERSHIP IN PRODUCTION & SUPPLY CHAIN



OUR GAS SOLUTIONS

Applications	Our products	Our services
Upstream Oil well pressurisation Enhanced oil recovery (EOR) Oil well stimulation	NitrogenHydrogen	Production and supply of pure and mixed gases
Enhanced oil recovery (EOR) Oil well stimulation Downstream Blanketing of tanks Preventing the release of hydrocarbon emissions Preventing Oxygen ingress into vacuum units Purging Supply of Oxygen, Nitrogen and Hydrogen as process feed stock Calm chemical reactions Safely shutdown or start up refinery units Lowering Sulphur content in hydrocrackers and hydro-treaters Sulphur recovery applications Pipeline pigging Combustion efficiency at the furnace Break down of heavy hydrocarbons during the catalytic cracking process Fire extinction	 Hydrogen Oxygen Carbon dioxide Argon Welding gas Acetylene Mixed gases Specialty gases Dry ice Helium 	
Valve sealing Dry ice blasting Explosimetry Leak testing		engineering and installation Over the fence' gas supply

OUR GASES

At Gulf Cryo, gases and gas mixtures are prepared under controlled conditions following strict international standards ensuring tolerances are clearly defined.

Pure gases (Liquid and compressed)	Purity
Acetylene	98.5%
Argon	99.999%
Carbon Dioxide	99.9%
Hydrogen	99.999%
Nitrogen	99.999%
Helium	99.999%
Oxygen	99.5%
Argon/Helium mixture	
Argon/Hydrogen mixture	, p
Argon/Carbon Dioxide mixture	-

OUR SUPPLY AND PACKAGING OPTIONS

Operating in ten countries in the Middle East, Gulf Cryo covers a vast territory offering the supply of gases and the installation of equipment. We will provide you with the best available supply package to suit your business requirements.

Options				
Air separation unit installation ISO tanks and road tankers Tube trailers Cylinder racks Gas cylinders SMR PSA and membranes VPSA	Full gas supply distribution network Spot requirements for bulk products High volumes Medium volumes Low volumes For on-site Hydrogen supply For on-site Nitrogen supply For on-site Oxygen supply			

Talk to our applications engineers to identify the right solution for you.

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DECARBONIZING THE REGION

CCUS

Gulf Cryo was among the first pioneers in carbon capture and have started its first project in 2014, capturing the carbon emissions of Equate in Kuwait. This partnership paved the way for our current position in CCUS solutions. Today, we manage the CO2 full value chain from capture to utilization and sequestration, creating a circular carbon economy.

CARBON CAPTURE



CARBON EMISSION SOURCES





PURIFICATION



By Pipeline

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CARBON CAPTURE FACILITY





LIQUEFACTION

UTILIZATION & SEQUESTRATION



ENHANCED OIL/GAS RECOVERY (EOR/EGR)



GEOLOGICAL SEQUESTRATION



SYNTHETIC ADVANCED FUELS (METHANE, METHANOL, AVIATION FUELS)



SEAWATER DESALINATION



RIBUTION

FOOD PROCESSING & BEVERAGE



AGRICULTURE



ALGAE PRODUCTION



BUILDING MATERIALS (CONCRETE, CEMENT)



REFRIGERATION & COLD TRANSPORTATION



DRY ICE APPLICATIONS



POLYMERS

CCUS

Gulf Cryo possesses the expertise to engineer state-of-the-art carbon capture solutions and to innovate utilization & sequestration applications in various industries.

- ☐ We continuously invest in carbon capture from heavy industries
- We provide engineering solutions to capture CO2
- We evaluate new technologies to capture CO₂ more efficiently
- We develop new applications to utilize and sequestrate CO₂ in various industries
- ☐ We decarbonize industries through innovative CO2 applications (building materials and water remineralization to name a few)
- ☐ We possess an extensive supply chain infrastructure servicing the whole region
- ☐ We provide assistance with market understanding

Currently capturing 100,000 MTPA of CO₂, Gulf Cryo is increasing its carbon capture rate exponentially within the next 10 years.



HYDROGEN

Hydrogen plays a key role in energy transition enabling a sustainable energy mix. As an industrial gas company, Gulf Cryo is an expert in producing Hydrogen through electrolysis and is soon turning its plants into green Hydrogen facilities. We continuously evaluate different technologies and solutions to help develop the green hydrogen economy.

WE INVEST

IN LOW-CARBON H₂ PRODUCTION & DISTRIBUTION

DEVELOP

STRONG PARTNERSHIPS THAT ENABLE THE DEVELOPMENT OF H₂-RELATED PROJECTS

DEPLOY

H₂ INTEGRATED & INNOVATIVE SOLUTIONS FOR DECARBONIZING ENERGY, INDUSTRIES & MOBILITY

Gulf Cryo is committed to providing gases with an unrivalled technical innovation offered through a reliable and consistent supply of high-purity oxygen, nitrogen, carbon dioxide and other gases for the Oil & Gas industry.



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