



SOLUTIONS FOR TOMORROW'S
ENERGY NEEDS



Innovative technologies
and onsite analysis

MANAGING RISK AND MAXIMISING RETURNS IN UPSTREAM **ADDS UP**

SGS UPSTREAM SERVICES

SGS



**MANAGING RISK AND
MAXIMISING RETURNS
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ADDS UP

SGS ADDS VALUE BY INCREASING EFFICIENCY, IMPROVING
QUALITY, REDUCING RISKS AND BUILDING TRUST

PRODUCTION

**MAXIMISE
RETURNS**

DEVELOPMENT

INNOVATION

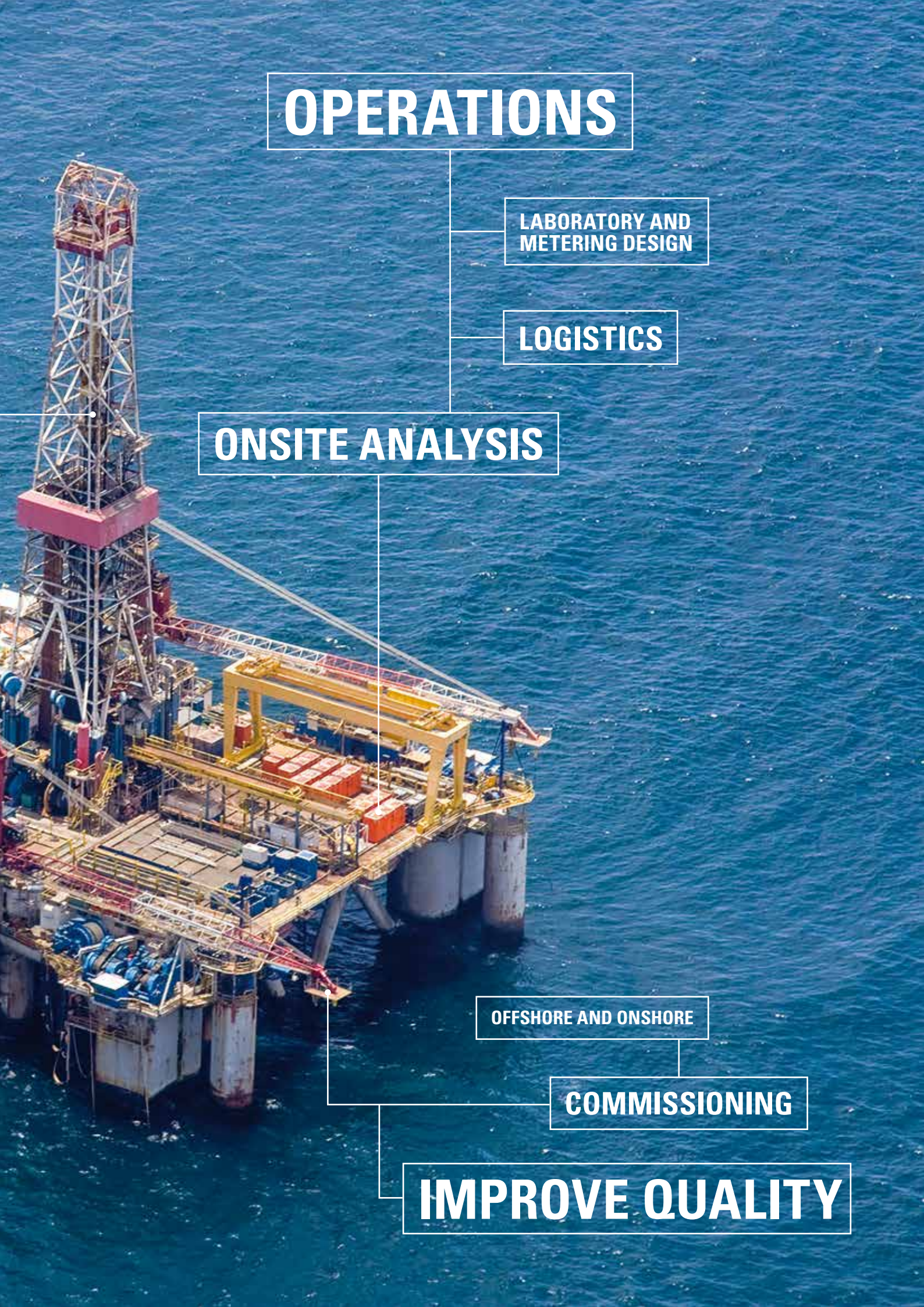
EXPLORATION

MANAGE RISK

APPRAISAL

GEOLOGICAL ANALYSIS





OPERATIONS

**LABORATORY AND
METERING DESIGN**

LOGISTICS

ONSITE ANALYSIS

OFFSHORE AND ONSHORE

COMMISSIONING

IMPROVE QUALITY

SGS is a world leader in providing innovative solutions to tomorrow's energy needs.

From exploration, appraisal and development to design and commissioning, and productions operation support, we offer a variety of services and solutions that cover the entire upstream sector.

ABOUT UPSTREAM SERVICES

Exploration, Appraisal and Development

Our experts help you to optimise your operations in both conventional and unconventional plays with:

- Geological studies for prospect generation, frontier exploration, field appraisal and development planning
- Seismic processing and imaging and interpretation
- Reservoir geology, sedimentology studies, structural and basin modelling
- Geo-analytical solutions including geochemistry, optical petrology, X-ray diffraction (XRD), Qemscan and scanning electron microscopy (SEM) analysis (Advanced Reservoir Quality Services (ARQS))
- Petrophysical analysis, log interpretation, core analyses, rock properties determination including shale characterisation and geomechanical studies
- Reservoir engineering, dynamic modelling and history matching, production forecasting, sensitivity analysis
- Facilities design, network modelling and flow assurance
- Asset value assurance including equity re-determination, reserve certification, technical audits and Competent Persons Reporting (CPR)
- Well testing services including SWT, DST, Multi Phase Flow Metering (MPFM) and TCP
- Cased hole services including E-Line and Slickline for production logging, well integrity measurements, well intervention services, perforations and downhole sampling
- Reservoir fluids analyses including PVT Composition and other advanced analyses
- Sample management
- Drill pipe and bottom hole assembly (BHA) inspections
- Oilfield mercury analysis, crude oil assays and profiling
- Onsite analysis through the use of mobile laboratories
- Health Safety and Environment (HSE) and Risk Management Services





UPSTREAM

Design and Commissioning

Our experience in laboratory and metering design and commissioning allows us to help you by:

- Designing, equipping and commissioning onsite production laboratories
- Providing advice and consulting services on fiscal and allocation measurement and hydrocarbon allocation
- Conducting and producing fiscal and allocation uncertainty studies for both regulatory and contract purposes
- Validating metering systems through acceptance testing either onsite or at the factory
- Conducting factory and onsite calibration using water, gas or hydrocarbons as calibration mediums
- Providing comprehensive project specific or general training on various topics
- Offering production technology services that provide onsite support integrated with geoscience, reservoir and well engineering services

Production Operation Support

With our expertise throughout all aspects of production operations, we provide:

- Production testing services including surface (separator) well testing and Multi Phase Flow Meters (MPFM)
- Cased hole services including E-Line and Slickline for production logging, well integrity measurements, well intervention services, perforating and downhole sampling
- Non-intervention based well integrity services for leak detection and well head, casing and tubing integrity
- Laboratory services including technical support, operations management, technical staff equipment and facility rental
- Metering services to accurately measure the amount of hydrocarbons extracted and produced
- Measurement and analytical services necessary to operate hydrocarbon allocation systems
- Technical staffing
- Technical screening, support, engineering and evaluation services

for enhanced oil recovery (EOR), underground gas storage including CO₂ sequestration and gas injection for enhanced oil recovery (EOR) or in aquifers

- Asset Value assurance including equity re-determination, reserve certification, technical audits, and Competent Persons Reporting (CPR)



EXPLORE



LOCATE



ANALYSE



EXTRACT



BENEFITS

Ultimately, every player in the value chain benefits from the innovations and quality of the products that come from the oil and gas sector – everything from transport fuel and heating oil to plastics, fertilisers and pharmaceuticals. Using innovation, and a deep understanding of the global market, we help you in optimising and managing risk.

As a leading solutions provider for the oil and gas sector, our robust technology, innovative approach, technical support and dedication to quality and safety bring you tangible benefits, in both the upstream and downstream sectors.

With a wide range of services and solutions leveraging expertise from many areas of the SGS Group, including oil and gas industry services, minerals services, industrial services, environmental services and certification and audit services, we empower you to outperform in today's marketplaces. Risk management, supply chain monitoring and compliance activities are all part of the services we provide that help optimise your business.

SGS **ADDS UP**

SGS is the world's leading inspection, verification, testing and certification company. Recognised as the global benchmark for quality and integrity, we employ over 85 000 people and operate a network of more than 1 800 offices and laboratories around the world. We are constantly looking beyond customers' and society's expectations in order to deliver market leading services wherever they are needed.

We have a history of undertaking and successfully executing large-scale, complex international projects. With a presence in every single region around the globe, our people speak the language and understand the culture of the local market and operate globally in a consistent, reliable and effective manner.

We provide innovative services and solutions for every part of the oil, gas and chemicals industry. Our global network of offices and laboratories, alongside our dedicated team, allows us to respond to your needs, when and where they occur. Our reputation for independence, excellence and innovation has established us as the market leader in providing services that improve efficiency, reduce risk and deliver competitive advantage for you.

**FOR MORE INFORMATION ABOUT
UPSTREAM SOLUTIONS FROM SGS,
CONTACT OGC@SGS.COM OR VISIT
WWW.SGS.COM/OIL-GAS/UPSTREAM**





WWW.SGS.COM

WHEN YOU NEED TO BE SURE

