



# OPTIMISING SOLUTIONS

FOR THE OIL, GAS & CHEMICALS INDUSTRY

**ADDS UP**

2018

**SGS**



An aerial photograph of an industrial facility, likely an oil or gas platform. The floor is painted a vibrant teal color, with bright yellow lines marking safety zones and walkways. Various pieces of industrial equipment, including pipes, valves, and a large circular hatch with a yellow rim, are visible. Long, dark shadows are cast across the teal surface, suggesting a low sun position. A small figure of a person is visible in the middle ground, providing a sense of scale.

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



## TODAY'S DISCUSSION



### OUR APPROACH



### UPSTREAM SERVICES



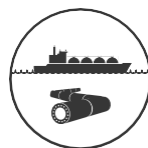
#### EXPLORATION & APPRAISAL



#### DESIGN & COMMISSIONING



#### PRODUCTION OPERATIONS



### DOWNSTREAM SERVICES



#### REFINING & PROCESSING



#### LOGISTICS



#### DISTRIBUTION & RETAIL





**SWITCH ON** TO A REAL ADVANTAGE  
WITH THE MARKET LEADER





SWITCH ON  
TO YOUR OPTIMISATION STRATEGY WITH SGS

OVER THE NEXT  
**20 YEARS**

GLOBAL DEMAND FOR ENERGY  
WILL INCREASE **50%**  
BY MORE THAN **50%**

WHERE WILL IT ALL COME FROM ?

**HOW FAR WILL YOU  
HAVE TO GO TO GET IT ?**

## SOLUTIONS



MANAGE RISK



IMPROVE QUALITY



MAXIMISE RETURNS



# SGS OGC SERVICES

## PROVIDING SOLUTIONS ACROSS THE VALUE CHAIN

SERVICES	UPSTREAM			DOWNSTREAM			RETAIL AND MARKETING
	EXPLORATION AND APPRAISAL	DRILLING	PRODUCTION	STORAGE AND LOGISTICS	REFINING AND PROCESSING	LOGISTICS	RETAIL AND MARKETING
Subsurface Consultancy	✓	✓	✓				
Well Testing Services	✓		✓				
Cased Hole Services			✓				
Production Fluids Testing	✓		✓				
Metering and Measurement Consulting			✓	✓			
Tools		✓					
Wellhead Services			✓				
Rock Properties Testing	✓	✓					
Trade Related Services				✓	✓	✓	
Non-Inspection Related Testing		✓	✓		✓		✓
Lab Outsourcing Solutions		✓	✓		✓		✓
Plant and Terminal Operations				✓	✓	✓	✓
Metering and Instrumentation				✓	✓	✓	✓
Oil Condition Monitoring						✓	✓
Sample Management Services						✓	✓
Fuel Integrity Services						✓	✓
Cargo Treatment Services					✓	✓	✓



# SGS OGC SERVICES

## PROVIDING SOLUTIONS ACROSS THE VALUE CHAIN

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	EXPLORATION AND APPRAISAL	DRILLING	PRODUCTION	STORAGE AND LOGISTICS	REFINING AND PROCESSING	LOGISTICS
Subsurface Consultancy	✓	✓	✓			
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Production Fluids Testing	✓		✓			
Metering and Measurement Consulting			✓	✓		
Tools		✓				
Wellhead Services			✓			
Rock Properties Testing	✓	✓				
Trade Related Services				✓	✓	✓
Non-Inspection Related Testing		✓	✓		✓	
Lab Outsourcing Solutions		✓	✓		✓	
Plant and Terminal Operations				✓	✓	✓
Metering and Instrumentation				✓	✓	✓
Oil Condition Monitoring						✓
Sample Management Services						✓
Fuel Integrity Services						✓
Cargo Treatment Services					✓	✓



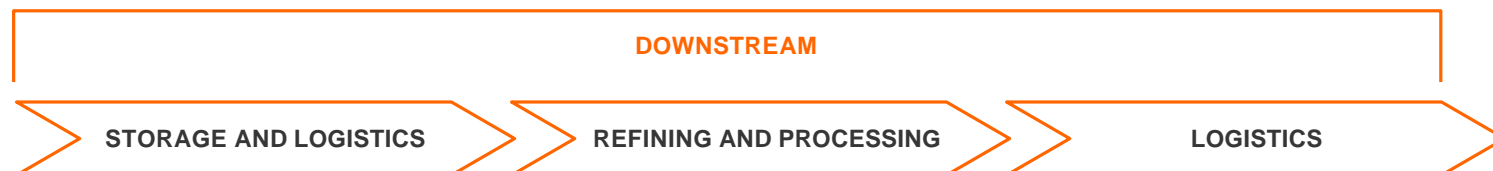
# SGS OGC SERVICES PROVIDING SOLUTIONS ACROSS THE VALUE CHAIN

SERVICES	UPSTREAM		
	EXPLORATION AND APPRAISAL	DRILLING	PRODUCTION
Subsurface Consultancy	✓	✓	✓
Well Testing Services	✓		✓
Cased Hole Services			✓
Production Fluids Testing	✓		✓
Metering and Measurement Consulting			✓
Tools		✓	
Wellhead Services			✓
Rock Properties Testing	✓	✓	
Trade Related Services			
Non-Inspection Related Testing		✓	✓
Lab Outsourcing Solutions		✓	✓





# SGS OGC SERVICES PROVIDING SOLUTIONS ACROSS THE VALUE CHAIN



## SERVICES

Metering and Measurement Consulting	✓		
Trade Related Services	✓	✓	✓
Non-Inspection Related Testing		✓	
Lab Outsourcing Solutions		✓	
Plant and Terminal Operations	✓	✓	✓
Metering and Instrumentation	✓	✓	✓
Oil Condition Monitoring			✓
Sample Management Services			✓
Fuel Integrity Services			✓
Cargo Treatment Services		✓	✓



**UPSTREAM SOLUTIONS THAT  
LOCATE, ANALYSE AND EXTRACT**





## UPSTREAM SERVICES – OVERVIEW



THE MAIN FOCUS OF OUR SERVICES AND SOLUTIONS IN THE SECTOR ARE:



**EXPLORATION & APPRAISAL**



**LABORATORY & METERING DESIGN & COMMISSIONING**



**PRODUCTION OPERATIONS SUPPORT**

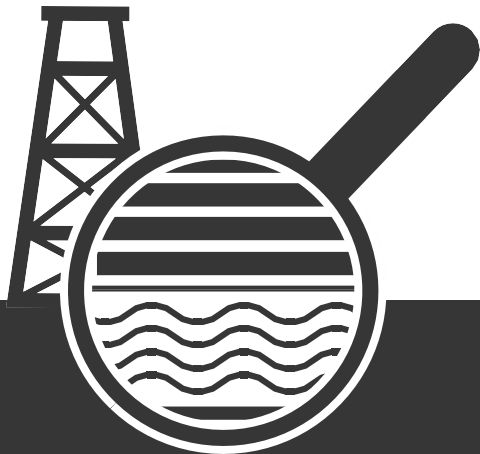


## EXPLORATION & APPRAISAL – OVERVIEW

WITHIN EXPLORATION AND APPRAISAL, OUR EXPERTS:

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- PROVIDE **GEOSCIENCE SERVICES**
- HANDLE **GEOLOGICAL ANALYSIS**
- DELIVER **PETROPHYSICAL SERVICES**
- SUPPLY **RESERVOIR ENGINEERING SERVICES**
- **ANALYZE AND STUDY RESERVOIR FLUIDS**
- CONDUCT **ONSITE ANALYSIS**  
THROUGH THE USE OF MOBILE LABORATORIES
- PERFORM **OILFIELD MERCURY ANALYSIS,**  
**CRUDE OIL ASSAYS** AND PROFILING
- PERFORM **SAMPLE MANAGEMENT**







**GEOSCIENCE SERVICES**



**GEOLOGICAL ANALYSIS**



**PETROPHYSICAL SERVICES**





**RESERVOIR ENGINEERING SERVICES**



**RESERVOIR FLUIDS ANALYSIS**



**ON SITE ANALYSIS**



**OILFIELD MERCURY ANALYSIS AND SPECIATION**





**CRUDE OIL ASSAY**



**SAMPLE MANAGEMENT & LOGISTIC SERVICES**



## DESIGN & COMMISSIONING – OVERVIEW

OUR EXPERIENCE IN LABORATORY AND METERING DESIGN  
AND COMMISSIONING ALLOWS US TO HELP YOU BY:

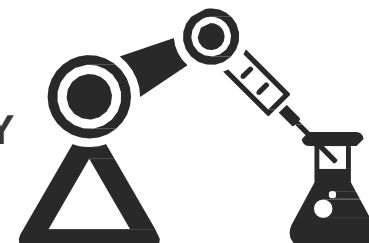
— **DESIGNING, EQUIPPING AND COMMISSIONING**

— **PROVIDING ADVICE AND CONSULTING SERVICES  
ON FISCAL AND ALLOCATION MEASUREMENT  
AND HYDROCARBON ALLOCATION**

— **CONDUCTING AND PRODUCING FISCAL AND ALLOCATION  
UNCERTAINTY STUDIES VALIDATING METERING SYSTEMS**

— **CONDUCTING FACTORY  
AND ONSITE CALIBRATION**

— **OFFERING PRODUCTION TECHNOLOGY**



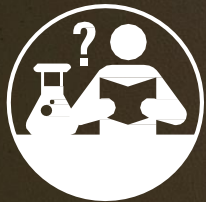




**LABORATORY DESIGN & COMMISSIONING**



**MEASUREMENT & ALLOCATION CONSULTANCY**



**UNCERTAINTY STUDIES**



**METERING SERVICES**





**FACTORY & SITE CALIBRATION ON WATER & PRODUCT**



**LABORATORY DESIGN & COMMISSIONING**



**PRODUCTION TECHNOLOGY**



## PRODUCTION OPERATIONS – OVERVIEW

WITH OUR EXPERTISE THROUGHOUT ALL ASPECTS  
OF PRODUCTION OPERATIONS, WE PROVIDE:

— **WELL MAINTENANCE**

— **WIRELINE AND SLICKLINE**

— **WELL TECHNOLOGY SERVICES**

— **LABORATORY SERVICES**

— **METERING SERVICES**

— **MEASUREMENT AND ANALYTICAL SERVICES  
NECESSARY TO OPERATE HYDROCARBON  
ALLOCATION SYSTEMS**







**WELL SERVICES**



**SLICKLINE / WIRELINE SERVICES**



**WELL TECHNOLOGY**





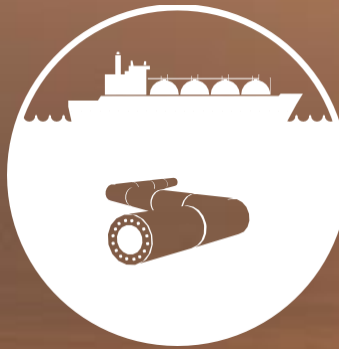
**LABORATORY SERVICES**



**METERING SERVICES**



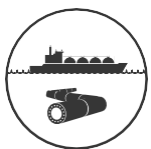
**ALLOCATION SERVICES**



**DOWNSTREAM SOLUTIONS THAT  
REFINE, PROCESS AND DELIVER**



## DOWNSTREAM SERVICES – OVERVIEW



THROUGHOUT THE DOWNSTREAM SECTOR, WE PROVIDE SOLUTIONS IN THE AREAS OF:



**REFINING & PROCESSING**



**LOGISTICS**



**DISTRIBUTION & RETAIL**

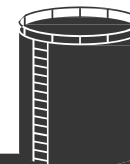
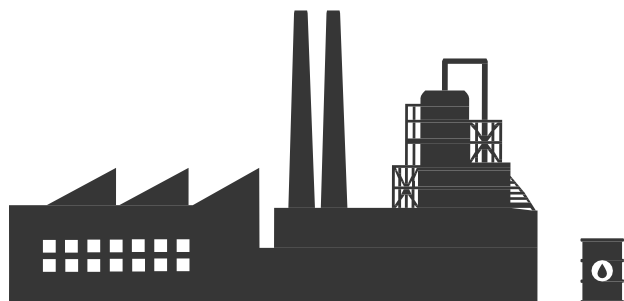




## REFINING & PROCESSING – OVERVIEW

IN THE REFINING AND PROCESSING OF CRUDE OIL AND NATURAL GAS,  
WE HELP YOU BY PROVIDING THE FOLLOWING SERVICES:

- **LABORATORY TESTING, DESIGN AND OUTSOURCING**
- **OUTSOURCED PLANT AND TERMINAL OPERATIONS**
- **METERING AND CALIBRATION**
- **VALUE ADDED BLENDING AND CARGO TREATMENT**
- **MEASUREMENT, SAMPLING AND ANALYSIS**
- **OUTSOURCING SAMPLE HANDLING AND DISTRIBUTION**
- **BIOFUELS BLENDING**





**LABORATORY TESTING DESIGN & OUTSOURCING**



**OUTSOURCED PLANT & TERMINAL OPERATIONS**



**CALIBRATION OF INSTRUMENTATION BLENDING**



**CARGO TREATMENT (ADDITIVES)**





**MEASUREMENT SAMPLING & ANALYSIS**



**SAMPLE HANDLING & DISTRIBUTION**



**BIOFUELS BLENDING**



## LOGISTICS – OVERVIEW

THROUGHOUT THE HYDROCARBON SUPPLY CHAIN, WE PROVIDE SERVICES THAT FOCUS ON LOGISTICS, INCLUDING:

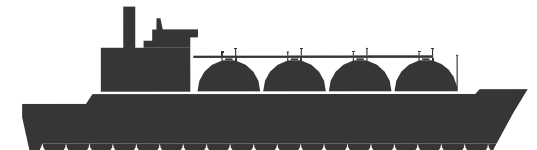
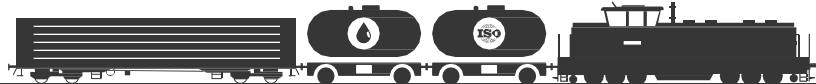
— **BUNKER FUEL SURVEYS**

— **TANK CLEANLINESS INSPECTIONS**

— **VOYAGE ANALYSIS**

— **VESSEL ON HIRE AND OFF HIRE SURVEYS**

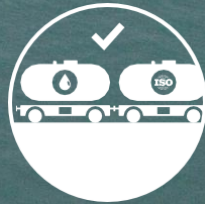
— **LNG SERVICES**







**BUNKER FUEL SERVICES**



**TANK CLEANLINESS INSPECTIONS**



**VOYAGE ANALYSIS**



**VESSEL ON HIRE & OFF HIRE SURVEYS**







**LNG SERVICES:** PROVIDE INDEPENDENT  
INSPECTION, TESTING, VERIFICATION  
AND SPECIALISED TECHNICAL SERVICES  
TO THE LNG INDUSTRY





## DISTRIBUTION & RETAIL – OVERVIEW

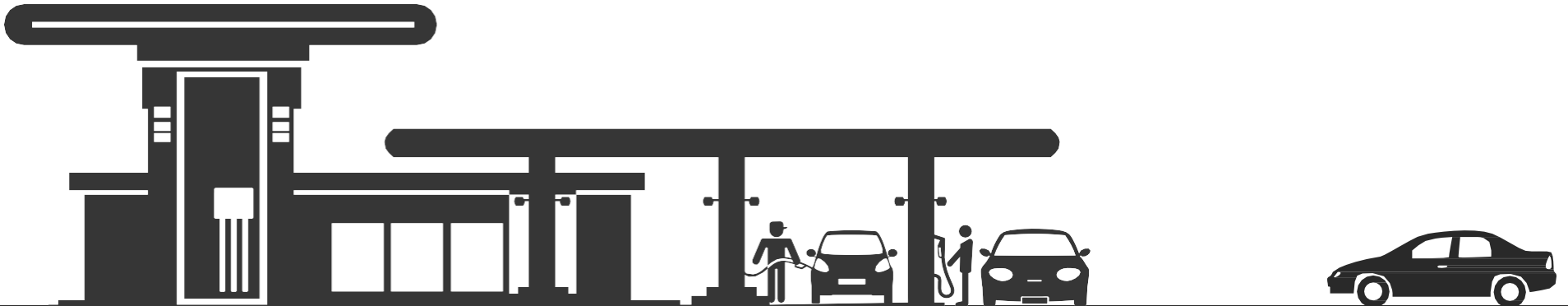
IN THE DISTRIBUTION AND RETAIL PHASE, WE SPECIALIZE IN:

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**FUEL INTEGRITY**

**FUEL QUALITY**

**EMERGENCY RESPONSE SERVICES**





**FUEL INTEGRITY**



**FUEL QUALITY**



**EMERGENCY RESPONSE SERVICES**





**OPTIMISE YOUR ACTIVITIES** WITH SERVICES  
AND SOLUTIONS FROM THE MARKET LEADER

**WWW.SGS.COM**

**WHEN YOU NEED TO BE SURE**

