Oil & Gas Upstream Improving your E&P process

Optimising the operation of oil and gas sites where access is increasingly difficult, while addressing crucial environmental issues requires ever more efficient solutions. In order to meet these objectives Actemium supports its customers all over the world with a comprehensive range of onshore and offshore production skills that take care of quality and safety at every stage of the project. Located as close as possible to production sites, its human-sized business units develop local skills and partnerships.









Safety, our priority







An international presence and a local approach

Actemium is the VINCI Energies brand dedicated to industry. Present throughout the industrial life cycle, Actemium designs, builds and maintains its customers' facilities, with the aim of improving their industrial

Its Business Units are located close to production sites, in which they build long-term relationships with their customers. Thanks to the profound knowledge of the customers process and equipment, they are able to design and implement customised solutions.



Actemium 100% dedicated to industry

300

38

20 000

At the heart **of industrial** performance



Business units

Engineers & technicians

Countries

2,1 billion € turnover

References

ADGAS ADMA-OPCO Aker Solutions Anadarko Atlantic LNG BG Group Borouge Chevron

ConocoPhillips DSME ENI ExxonMobil GASCO GCCIA Hess HHI

Kahramaa Perenco KNPC Premier Oil QAPCO Maersk Oil Qatalum Noble Energy Qatargas Origin Energy Qatofin ORYX PETROLEUM QDVC

INPEX

Peak Oil&Gas Samsung Shell Sonatrach Subsea 7 TAKREER

Talisman

Energy Technip Total E&P Woodside ZADCO





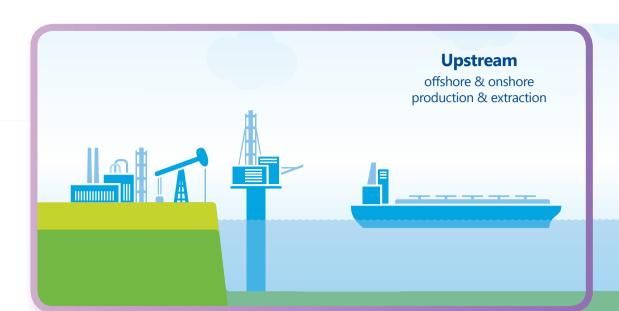
www.actemium.com



Solutions & Services for Industry



Actemium has been active in the Oil & Gas industry for more than 50 years and supports its customers throughout the entire life of their projects. With more than 4,000 specialized engineers and technicians in this segment worldwide as well as on niche markets, and thanks to its safety approach and innovative solutions, Actemium is a recognized player with an extensive portfolio of expertise in integration projects, maintenance and project related services.



Midstream transportation & storage





Design

Iln order to provide innovative solutions and optimum quality of services, the Actemium business units specialise in Oil & Gas disciplines and strive to continuously develop their engineering capabilities on a continuous basis. Their constant investment in employees' qualifications and training are appreciated on site, where production needs and constraints require complex systems and procedures, fully consistent with employee and asset safety.

Skills

- Fingineering (basic, feasibility studies, FEED, detail), functional analysis
- Basic and construction detailed engineering of control and safety systems modernization, extension projects (brownfield projects)
- Basic and construction detailed engineering for integration of multi telecommunication and analyzer systems and instrumentation
- Basic and construction detailed engineering for electrical systems
- → Engineering and integration of safety instrument systems (HIPS-High Integrity Protection System)
- Fingineering, specification and functional analysis of well control systems (OCWR)
- → Analyzer Systems
- → Risk simulation via our tool Xistos



Build

As an EPC Contractor, Actemium deploys its services at the very core of onshore and offshore production. To that end, Actemium relies on the strength of its network of business units and that of the VINCI group and is able to mobilize project management and execution teams in cooperation with its design offices. Its experts and technicians are specialized in modernization and revamping of production sites, and are familiar with live operational constraints, requiring quality, safety and planning.

Skills

A unique combination of:

- → Large project management expertise
- → Multidisciplinary technical expertise
- → Oil & Gas specialized resources
- Familiarity with plant operating conditions, hot and cold transfers
- Capability to act locally, close to customers and sites

Areas of expertise:

- Legion EPCC (brownfield and greenfield)
- → Turn key projects offshore/onshore
- Systems: ICSS, DCS, ESD, F&G, PLC, SAFETY PLC, ...
- Instrumentation upgrade and revamping
- → Electrical packages and power distribution systems
- Power generation (installation or revamping of fuel/gas turbine)
- → On-line Analyzer and Laboratory Packages



Maintain

The Maintenance solution is tailored for the requirements of major oil & gas operators and is based on maintenance engineering contracts or long-term onsite multidisciplinary maintenance contracts. Actemium's global maintenance solutions include training local staff with specific programmes in order to ensure a durable transfer of competences and skills.

Skill

General Maintenance & Inspection Services:

Design and execution of multidisciplinary maintenance (E&I, analysers, mechanical, rotating, HVAC.....)

Maintenance & Inspection Engineering Contract:

- → Maintenance, audits and Inspection
- → M&I Methods implementation (criticality studies, RCM, RBI,...)/integrity management
- → As built documentation
- Performance standard for critical safety
- → Computerized maintenance & inspection system
- → Operation and maintenance manuals/spare parts
- → Data collection and compilation/database creation

Global Maintenance Contract:

- → Preparation ans scheduling
- → Maintenance on process, safety, facilities, assets
- → Preventive and curative maintenance/repairs
- Spare parts management
- Feedback analysis and continuous improvement

Training

The oil and gas industry is continuously evolving and companies have an increased need of experienced Employees, trained to operate and maintain. Specific training courses have been provided for more than 40 years in dedicated centres, and our Competence Management System (CMS) ensures they are implemented in a systematic and sustained quality methodology. Tailored programs focus on international standards requirements. Trainers and methods are both OPITO-certified and ISO 9001-approved.

Skills

- | Implementation of training centers in line with international standards
- → Implementation of Competency Management
- System to obtain personnel international certification
- Management of training centre
- → Organisation of remote training sessions and staff support programs
- → Issuing certified FIEEC or OPITO diplomas
- Training operators competent in all Oil & Gas disciplines



Commissioning

Downstream

refinery

Commissioning is a critical phase in every project and presents a combination of challenges including the performance of functional verification in a safe and organised way and also accelerating project completion and transfer to the "commercial operation" phase while performing exhaustive testing of every element of the facility; then ensuring a safe, reliable and operational condition of the facility without jeopardizing costs and schedule.

Skills

A various range of offers:

- Larly Commissioning Engineering
- → Audits and technical reviews
- → Detailed Pre-commissioning and Commissioning preparation (document review, Subsystems list and breakdown, Commissioning procedures preparation, etc.)
- Pre-commissioning and Commissioning database implementation and management (WinPCS, ICAPS©, Zenator, etc.)
- Commissioning execution (from management of the activities to supervision or full execution)
- → Start-up (operation and performance tests)



Project Resource Services

With more than 1 000 experts who can be mobilized worldwide and its comprehensive database of 82,000 specialists, Actemium meets the expectations of major operations and engineering companies and remains committed to the development of their ambitious projects. Its objective is to deliver a responsive support, focused on its customer's objectives and backed by strong values.

Skills

Multi-disciplinary technical assistance:

- Lengineering design leads and supervision
- Project services (cost, estimating, planning)
- Contracts and procurement
- Safety and Quality management, QC and Vendor surveillance
- Construction management and supervision
- → Commissioning
- → Operations & maintenance
- → Project management/project control
- → Instrumentation: process control, analyzers, instruments, metering
- → Electrical: HV/LV, network management, power generation
- Automation: programmable logic controllers, distributed control systems, communication
- ¬└ Safety: emergency shutdown, fire & gas
- Telecom: network, telemetry
- Mechanical: rotating equipment, compressors, gas turbines
- → HVAC: cooling, pressurisation, ATEX systems
- → Process: utility, treatment, storage, loading, pumping station
- → Inspection: electricals, piping, ...
- → HSE: personnel, assets, environment
- Linergy efficiency: assets, environment, consumption