



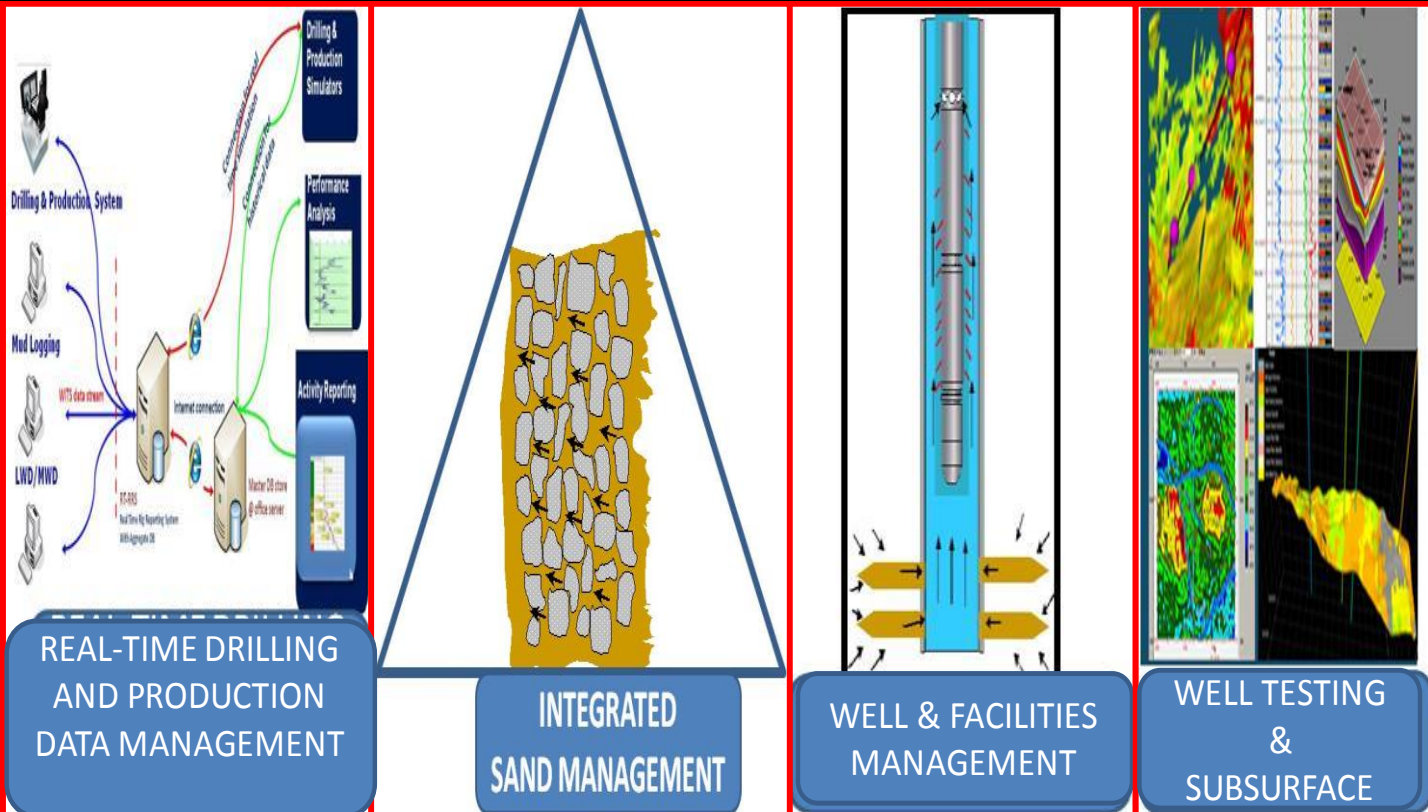
I-FLOW ENERGY LIMITED

Oil/Gas Asset Acquisition & Development

Real-Time Integrated Engineering Solutions & Flow Assurance Management

A team of highly skilled and experienced Technical Professionals delivering Quality Technical Solutions to maximise oilfield asset value, reduce the uncertainties associated with field development across the Composite Production System, and increase margins by reducing drilling and production difficulties, minimising non-productive time and improving operational efficiency.....

OUR BUSINESS FOCUS



COMPANY PROFILE

Registered No : RC1131057

I-FLOW ENERGY LTD– THE COMPANY

We are a specialist Oilfield Asset Acquisition and development technology company offering innovative Real Time Flow Assurance Management, Engineering Solutions plus Capacity Building/Competency Training to the world wide oil and gas industry, and the wider energy industry.

WE ARE EXPERTS IN

- ONSHORE & DEEPWATER SAND MANAGEMENT
- MULTIPHASE FLOW METERING/WELL TESTING & FLOW ASSURANCE
- WELL MANAGEMENT
- INTEGRITY MANAGEMENT
- INTEGRATED PETROLEUM ENGINEERING SOLUTION
- CAPACITY DEVELOPMENT

We work at the forefront of real time Well Testing; Sand and Well Integrity management. With our core of multidisciplinary specialists, we offer a unique engineered and integrated approach to integrated oilfield development, well construction management, integrated sand management and long term production maintenance for reduction in non-productive time.

With a technical centre in Lagos, Port-Harcourt and Edinburgh UK, I-Flow Energy provides, with our strategic partners, unique INTEGRATED specialised technology development and services :

- OIL/GAS ASSET ACQUISITION AND DEVELOPMENT
- ENGINEERING STUDIES/SOLUTIONS
- COMPLETION DESIGN & INSTALLATION
- REAL-TIME SOFTWARE SOLUTIONS
- CONSULTANCY/PROJECT MANAGEMENT
- LABORATORY SERVICES
- CAPACITY BUILDING/COMPETENCY TRAINING

Our Services include:

- TOTAL SAND MANAGEMENT SOLUTION
- INTEGRATED PETROLEUM ENGINEERING SERVICE
 - MULTIPHASE FLOW METERING/WELL TESTING
 - MULTIPHASE FLOW ASSURANCE STUDIES
 - PRODUCED WATER MANAGEMENT
 - RESERVOIR MANAGEMENT/FLOW ASSURANCE STUDIES
- WELL ENGINEERING/ ASSET PLANNING & FIELD DEVELOPMENT
 - DRILLING/COMPLETION PLANNING & INSTALLATION
 - DRILLING OPERATIONS MANAGEMENT
 - OUTSOURCING
 - DRILLING DATA MANAGEMENT SYSTEM
- INTEGRITY MANAGEMENT
 - PIPELINE & FACILITY INTEGRITY INSPECTION/CONDITION MONITORING
 - OFFSHORE INTEGRITY SOFTWARE

CAPACITY BUILDING/ACCREDITED SPECIALIST TRAINING

SAND MANAGEMENT & WELL SERVICES

We now offer full suite of Integrated Sand Management Services having recently incorporated Sand Monitoring Systems into our Business Portfolio. Our Services include Production Optimisation for reservoirs with sanding problems, Sand Production Prediction in Real-Time, Sand Monitoring, Sand Control Completion Design/Installation, Topside Solids Management Facilities Design and Supply & Multiphase Solids Transport Management

PRODUCTION MANAGEMENT WITH SMARTSAND

With our Ground breaking SMARTSAND, we optimise your reservoir delivery in real-time. We can predict if and when formation will fail and accurately forecast the Sand Production Rate and a function of time



INTRUSIVE SOLIDS MONITORING PROBE

SAND CONTROL COMPLETION ; SAND MONITORING & WELL SERVICES

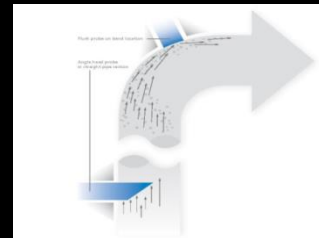
We offer a unique sand management service combining proven technology and engineering excellence to design/install for sand control, monitor and quantify any solids produced during a well test or production. IFLOW offer both intrusive and non-intrusive solids monitoring service for oil, gas and multiphase flow lines that provides operators with valuable data during well testing and production. Our Trained engineers are provided on site to install, service and interpret and give recommendations to the operators from the on line data to make on-site decisions. From the data our engineers can determine optimum flow rates.. Well clean up sequences are recorded and status verification provided for our multiphase solids transport efficiency prediction especially for long tiebacks



EROSION MONITORING TECHNOLOGY

PIPELINE & TOPSIDE SOLIDS MANAGEMENT

Pipeline Inspection; For existing sand producing assets and water injectors we proffer fit for purpose pipeline and topside sand and fines management, and PWRI management strategies to protect choke, pipeline and separator integrity supported by appropriate cleanup options to improve well delivery



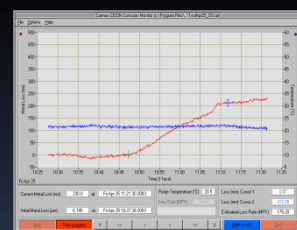
INTRUSIVE Vs NON-INTRUSIVE MONITORING

PREDICTIVE MODELLING SERVICE

We offer precise predictive modelling and accurate forecast with look ahead capability for multiphase production operations

We can deploy our Step Change Software Products to

- Carry out accurate Sand Production Rate forecast
- Predict Formation Grain Size & Pore Size Profiles from Logs
- Design and Optimise Sand Control Completions [Downhole vs Surface Control]
- Engineer and optimise in real-time Well Cleanup Operation
- Model and optimise Multiphase Sand Transport across the composite production system from the wellbore through the tieback to the Topside Separation System



SAND SIGNATURE



RETROFIT TOPSIDE SEPARATOR

MULTIPHASE FLOW METER AND WELL TESTING

We undertake real-time Well Testing with Dedicated Flow and HydroUnit
Our Flowatch MPFM is a non-intrusive in-line metering system providing real-time measurement of oil, gas, water and solids separation or moving parts.



MPFM

THE TECHNOLOGY

The flow rates and void fractions of oil, water and gas are calculated and transmitted in real-time based on the measurements of the fluid dielectric properties and of the differential pressure across a sized venturi inlet..

The Flowatch implements the latest state of the art technologies such as the NIR (near infrared) optical probe in order to provide an even more reliable and robust measurement to our customers.



TRAILER WELL TEST

COMPETITIVE ADVANTAGES

- No radioactive source used. Gamma Ray version also available for special applications
- Water cut measurement, independent of salinity, without transition region
- Covers all multiphase and wetgas flow regimes
- High repeatability and long term stability due to high quality components
- Suitable for mobile applications (e.g. on trailer or truck)
- Easy Calibration
- Near Infra Red System for WLR
- Operating range to 10Kpsi, 350°C, 100% GVF All Water Salinity

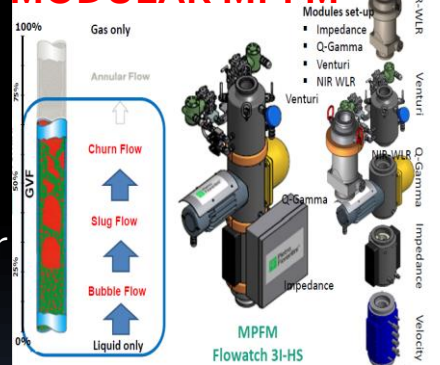


SUBSEA MPFM

APPLICATIONS

- Multiphase Flow Meter
- Wet Gas Meter
- Multiphase Wet Gas Flow Meter
- Well Testing Service[MER TEST]
- Topsides [Onshore & Inland] Version
- Deepwater/Subsea

MODULAR MPFM



Flowatch HMI

Local Host

Flowatch HMI features:

- User friendly
- Historical trending
- Diagnostic
- Redundancy
- Alarm info
- PVT calculation
- Excel reports
- Well selection
- Easy configuration
- Well profile creation

REAL-TIME WELL TEST DATA

ENGINEERING SERVICES & SOLUTIONS

Oilfield Development with Real Time Drilling and Production Operations Management Systems

Integrated Sand Management

- Real-Time Sand Production Forecast
- Real-Time Formation Grain Size Profiling
- Sand Monitoring with Intrusive and Non-intrusive Systems
- Sand Control Design and Evaluation
- Sand Transport Management
- Topside Solids Management**

Petroleum Engineering Studies

- Dynamic modelling and Simulation Studies
- Conventional & Unconventional Reservoir Management [Heavy Oil and Condensate Reservoirs]
- Well Testing/Analysis/Supervision
- Reservoir Production Surveillance

Produced Water Management

- Produced Water Management System Design
- Produced Water Analysis

Well Engineering Project Management

- Real-Time Pore Pressure Prediction
- Well Design/Completion
- Drilling Programme Design
- Mud Engineering
- Drilling/Well Operations Management

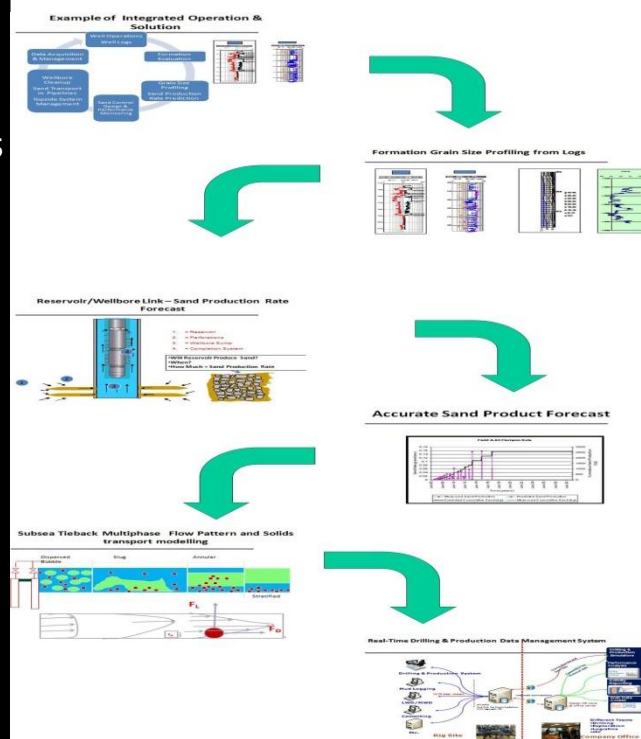
Data Management System Development Multiphase Flow Assurance Management

- Drilling & Production Data Management
- Multiphase Fluid Flow Dynamics
- Transient Flow Modelling/Management in Subsea Tiebacks
- Multiphase Solids Transport in Tiebacks
- Pipeline Engineering

Laboratory Services

- Drilling, Completion Fluids Analysis
- Core Analysis[Conventional & SCAL, Grain Size(LPSA, Wet & Dry Sieve Analysis)]

INTEGRATED SOLUTIONS



INTEGRATED OPERATIONS MANAGEMENT



THE PETROLEUM ENGINEERING ACADEMY

CAPACITY BUILDING & COMPETENCY TRAINING PROGRAMMES [With PD CERTIFICATION]

I-Flow Energy Ltd with its core team of specialist instructors organise and deliver a number of Fit-for-Purpose Short Courses. The PD Certified Courses accredited by International Professional Institutes are

S/N	COURSE TITLE	DURATION
1	Offshore Pipeline Engineering Design, Installation & Maintenance	5 Days
2.	Introduction to Deepwater Development and Subsea Production Systems	5Days
3.	Subsea Systems Integrity and Reliability Engineering	5Days
4	Offshore Flow Assurance Management Master Class	5Days
5	Offshore Engineering Master Class	5days
6	HP-HT Drilling & Completions	5Days
7	Produced Water Management Master Class	5 Days
8	Mud Engineering School	5Days
9	Advanced Reservoir Engineering	5days
10	Integrated Sand Management	5Days
11	Formation Damage Mechanisms & Stimulation Strategies for Oil and Gas Wells	5days
12	Mastering Gas and LNG Contracts	5Days
13	Oilfield Material Science Fundamentals	5days
14	Oil & Gas Fundamentals for Non-Technical Personnel	5 Days
15	Oil & Gas Foundation Course	8 Modules at 5Days per Module
16	Oilfield Conversion Course	5Days
17	DATA MANAGEMENT MASTER CLASS	5Days

OUR I-FLOW ENERGY PRODUCTS

OUR HARDWARES

- UNIQUE MULTIPHASE FLOW METER /WELL TEST FACILITY
- INTRUSIVE SOLIDS MONITORING SYSTEM
- PIPELINE INSPECTION HARDWARES

- DESANDERS

OUR UNIQUE SOFTWARE PRODUCTS

[Based on Proprietary IPR Algorithms]

- ❖ MPDEEP™ - Managed Pressure Drilling Management
- ❖ SMARTCONTROL™ – Dynamic pressure control/Pore Pressure Prediction
- ❖ SMARTSAND™ – Intelligent Sand & Production Management
- ❖ GRAVSIZE FOR SAND CONTROL COMPLETION
- ❖ SMARTMULTIPHASE™ – Multiphase Flow Simulation & Pipeline/Tieback Solids Transport Management
- ❖ REAL-TIME DRILLING DATA MANAGEMENT SYSTEM

- Predictive Process Modelling for Accurate Forecast
- Real-Time Diagnosis, Solution & Optimisation

- ADVANCED KNOW-HOW & SERVICES
Provision of integrated and cost reduction technology services

OUR MISSION & VALUE ADDITION

MISSION & GOAL

To maximise the return from oil & gas and energy assets and enhance (private and state) stakeholder value by actively participating throughout the assets' life cycles, from exploration to abandonment. Activities encompass working with upstream investment opportunities (principally in emerging provinces), providing technical and project management services, and, where appropriate, introducing these to sources of finance.

OIL & GAS ASSETS ACQUISITION & DEVELOPMENT

Our organisation leads a consortium of specialist investment and oilfield project management organisations with recognised expertise and experience in Integrated Petroleum Engineering Solutions, oilfield development/operation, Unconventional Energy Technologies and Capacity Building to the international oil and gas and energy industries .

OUR VALUE ADDITION



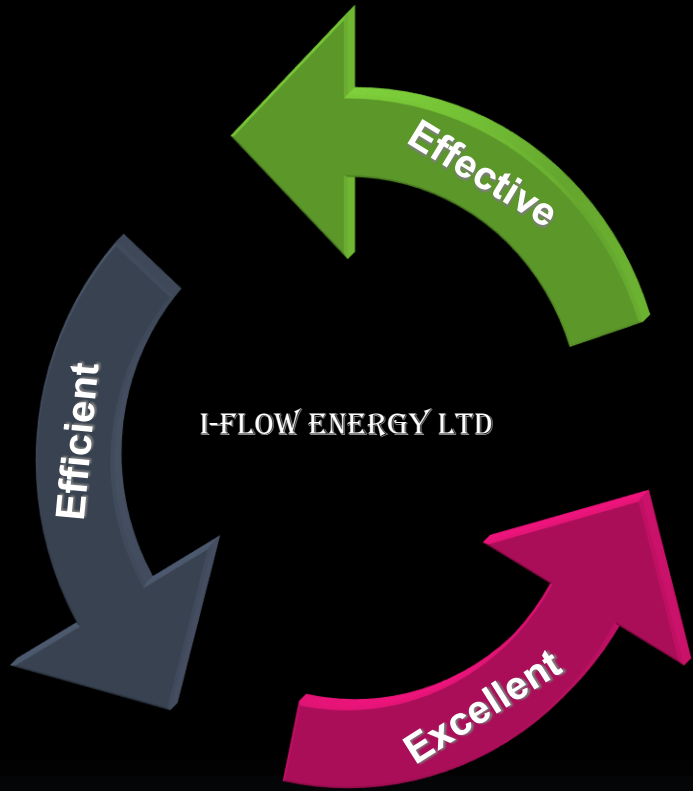
- SPECIALIST KNOWHOW
- EXPERIENCE
- TRACK RECORD
- FIT-FOR PURPOSE SOLUTION
- INDUSTRY AWARE

EXAMPLES OF PROJECTS & CLIENTS

DATE	COUNTRY	COMPANY	PROJECTS
2017-2018	CHINA	IDEAL OIL AND GAS /TARIM PETROLEUM	SAND MANAGEMENT TRAINING AND STRATEGIC STUDIES FOR HIGH RATE HP-HT GAS RESERVOIRS
2012-2014	UK/GHANA	TULLOWOIL	FDP FOR T.E.N FIELD
2013	NIGERIA	MIDWESTERN OIL/GAS PLC	SAND MANAGEMENT/RESEROIR MODELLING
2012	UK NORTH SEA	XCITE ENERGY	HEAVY OIL RESERVOIR/PRODUCTION MANAGEMENT
2011-PRESENT	NIGERIA	ENERGIA	FDP, WELL OPS, PE SUPPORT
2012	NIGERIA	ADDAX	UNMANNED PLATFORMS SAND MANAGEMENT APPRAISAL
2013	NIGERIA	TOTAL	PIPELINE INSPECTION
2012	NIGERIA	ADDAX	PIPELINE INSPECTION
2013	NIGERIA	SEVEN ENERGY	PIPELINE INSPECTION
2011-2012	PAPUA NEW GUINEA	Horizon	Sand Monitoring/Well Cleanup
2011	EGYPT	RWEDEA	Sand Management
2004- 2013	ANGOLA	TOTAL/EXPRO	Sand Management
2010	UK	TOTAL	FLOW ASSURANCE /Sand Management STUDIES FOR TOBERMORY ASSET
2008-10	Ivory Coast	CNR	Sand Management
2008	Mauritania	PETROBRAS	Sand Management
2008	Equatorial Guinea	NOBLE ENERGY	Sand Management
2008	Cameroon	Noble Energy	Sand Management
2007	Namibia	TullowOil	Sand Management
2007	Malaysia	Hess	Sand Management
2009	Trinidad	BP	Sand Control /Sand Management
1995-2000	North Sea Troll	Statoil	Sand Management
2002-DATE	International	Sand Management Network	Sand Control Reliability

OUR TEAM

Our Team in association with our Technical & Alliance Partners has over time built a high confidence stemming from high profile jobs execution and delivery across Oilfield operations, Drilling & Completion Design, Sand Management, Asset Evaluation, Reservoir Characterization, Static Geocellular Modeling, Dynamic Simulation and Reservoir Engineering , Capacity Building and Specialist Competency Training in Offshore Niger Delta, Offshore Angola, Malaysia, South Africa , North Sea, Central and South America.



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