PiENERGY NIGERIA

OPPORTUNITY FRAMING

OML 11 AOI (Ogoni Field) Development

ABOUT US

PI Energy Nigeria is part of a diverse group of companies with a strong presence in the oil and gas sectors across Africa and the Indian subcontinent. Our headquarters, strategically located in the heart of London, are just minutes away from key financial hubs, including the London Stock Exchange and the global commodities markets.

The Group also includes Albany Capital, renowned for its financial and risk management expertise, with operations based in Gibraltar, a global financial and energy hub.

Our Vision:

-To establish ourselves as a leading player in oil export, import, extraction, and refining.

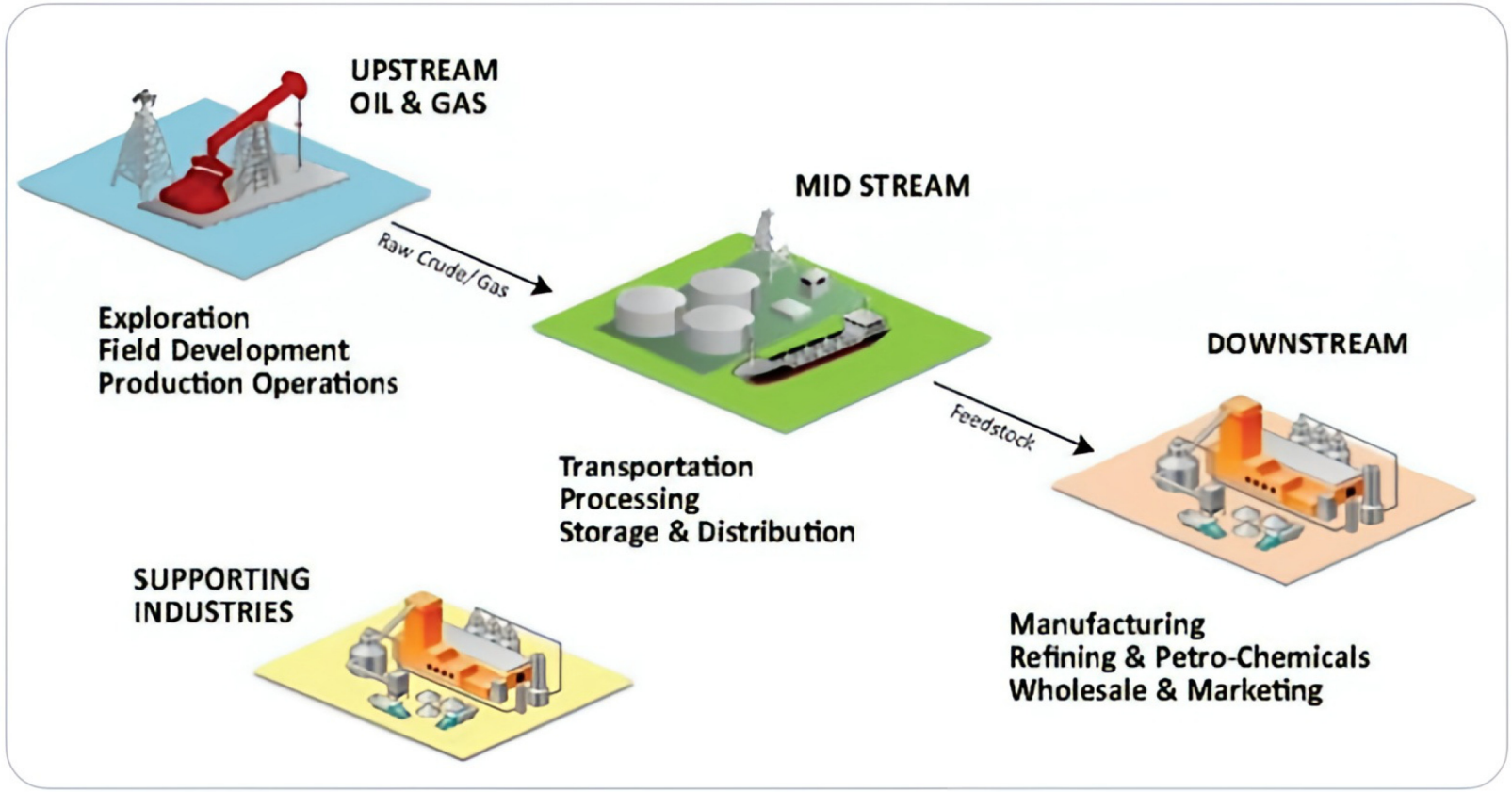
-To foster long-term business growth by leveraging our expertise, strong business ethics, and commitment to reliability.

-To expand our core investments and extend the Group's strategic insights into the luxury industry.

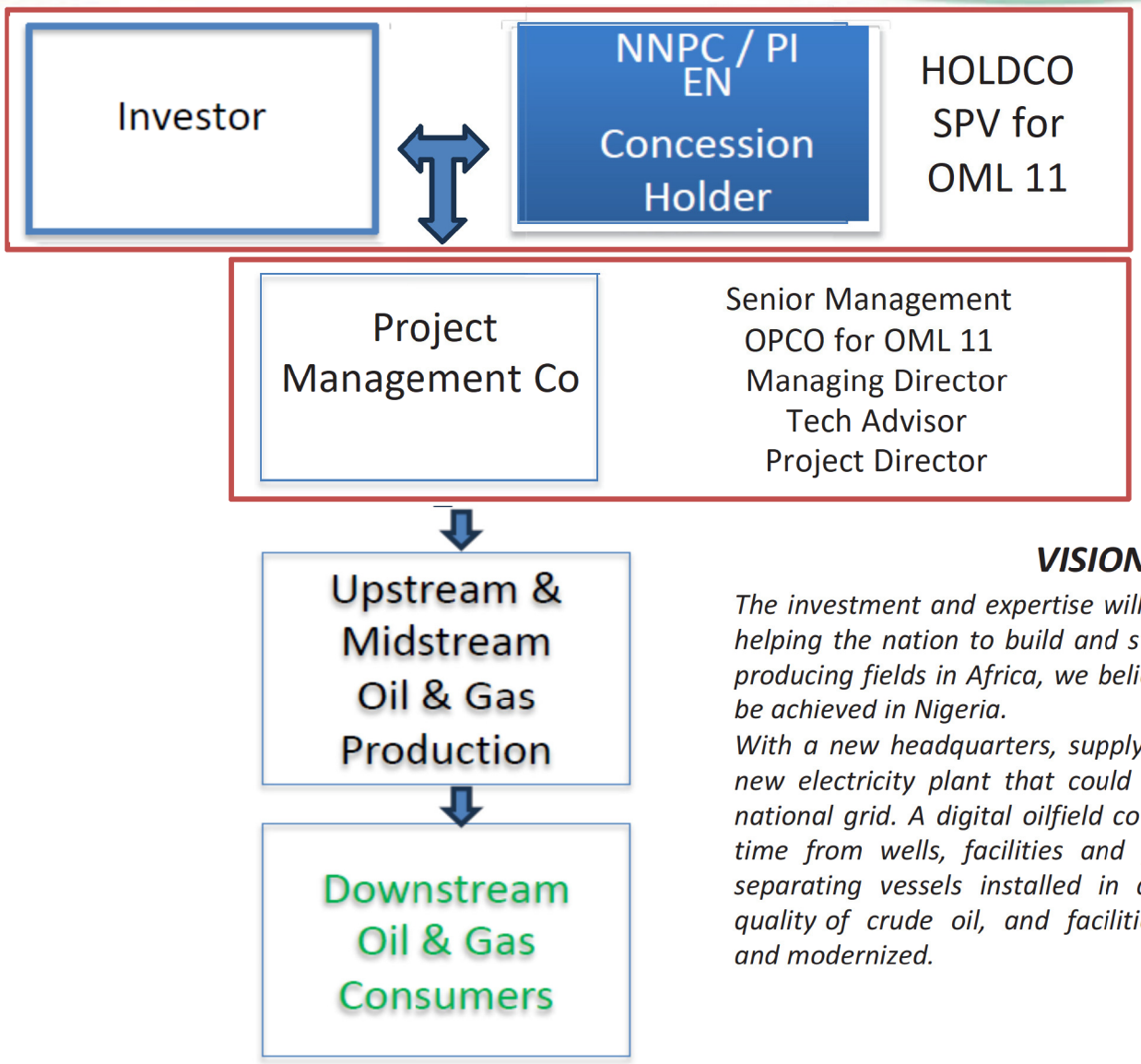
-To drive success both in the short and long term, consistently achieving excellence in all our business endeavors.

TOP-LEVEL STRATEGY

Pl Energy Nigeria to undertake this Oil & Gas opportunity directly through its Project Management partner, with highly experienced Well Engineering & Construction Management Services.



TOP-LEVEL STRATEGY



VISION

The investment and expertise will significantly increase revenues to Nigeria, helping the nation to build and stabilize its economy. As one of the largest producing fields in Africa, we believe OML 11 could be a model of what can be achieved in Nigeria.

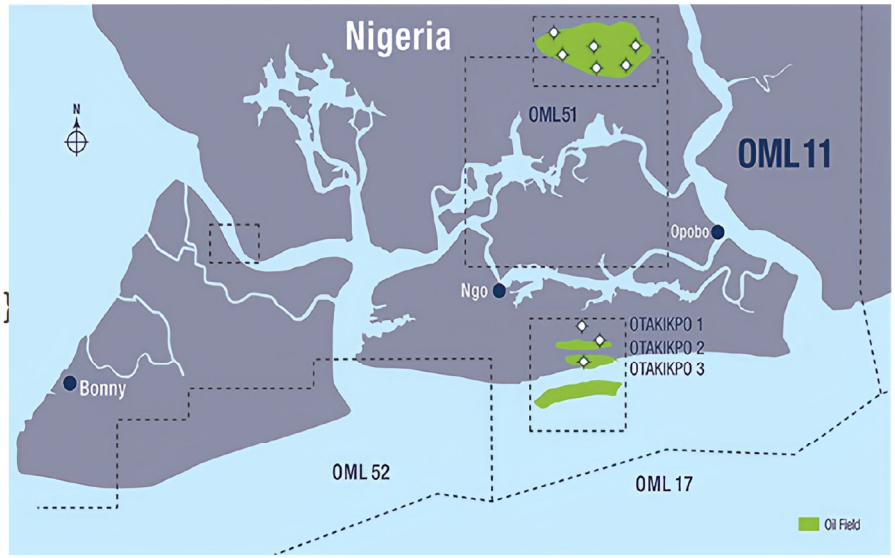
With a new headquarters, supply base, rehabilitation of producing wells, a new electricity plant that could provide power to the field and the local national grid. A digital oilfield could be created, with data captured in real time from wells, facilities and pipelines to guide decision-making. New separating vessels installed in degassing stations to maintain the high quality of crude oil, and facilities across the field would be upgraded and modernized.

FIELD SUMMARY

OML 11 lies in the southeastern Niger Delta and contains 33 oil and gas fields. This makes it one of the most important blocks in Nigeria.

The terrain is swamp to the south with numerous rivers and creeks. Port Harcourt is located in the northwest of the block, while the major yard and logistics base at Onne is located by the Bonny River.
The Bonny oil terminal - the largest in Nigeria - and Nigeria LNG (NLNG) are both at Bonny Island within OML 11. These terminals are supplied with oil and gas from all over the delta as well as offshore fields.

A high density of inter-field flowlines and strategic trunklines traverse OML 11.



In the central part of the block - and comprising about 30% of its area - lies the region of Ogoniland. In the late 1980s, concerns over the environmental impact of oil operations resulted in organised protests by the Ogoni people. Infrastructure was vandalised and increasing hostility towards oil operations made the region off-limits. In 1993, intervention by the Nigerian military followed by the execution of leading campaigners for the Ogonis in 1995, effectively ended all operations by Shell. All production in Ogoniland has been shut-in since. However, Ogoniland is still a transit route for a major pipeline transporting crude from other parts of the onshore delta.
Production from OML 11 is from six fields, outwith the Ogoni region. OML 11 also contributes substantial volumes of gas to NLNG, primarily from the Bonny field in the south of the block. Shell also operates the Afam VI gas-fired power station, which is supplied from the Afam field in the north of the block.

OML 11 HISTORY

TheGuardian
Conscience, Nurtured by Truth

Home Nigeria World Politics Sport Opinion

National

Transfer of OML 11 to NPDC: Ogoni vows to res resumption of crude, gas production

By **Kelvin Ebiri (Port Harcourt) and Kingsley Jeremiah (Abuja)**

17 March 2019 | 4:30 am

Ogoni community

- Vested Interests Behind Transfer Of OML 11 To NPDC · Change In Ownership Illegal, Lack Due Process, Transparency- Stakeholders
- Niger Delta Weighing Options On Development- Loyibo · Move Threatens Investors' Confidence – Olawuyi
- Presidency Mum, NNPC Denies Receiving Directive · Transfer On Track, Says

Aerial view of an oil spill in Bodo. 2010. Photo: UNEP.

Oceans in Transformation
June 2020

In March 2019, the Movement for the Survival of the Ogoni People (MOSOP) acquired a leaked letter that would signal a new stage in their struggle for environmental self-determination. The letter was addressed to the Group Managing Director of the Nigerian

Offshore Technology

News | August 23, 2021

Shell loses rights to operate OML 11 field in Nigeria

The latest judgement overturns the Federal High Court's decision in 2019 that Shell was entitled to the OML 11 licence renewal.

By Archana Rani

COMMUNITY ENGAGEMENT

From the outset, the safety of the people working has to be our number one priority. We can introduce mandatory personal protective equipment, 'control of work' safety processes and world-class, 24-hour medical care for all staff working at the field.

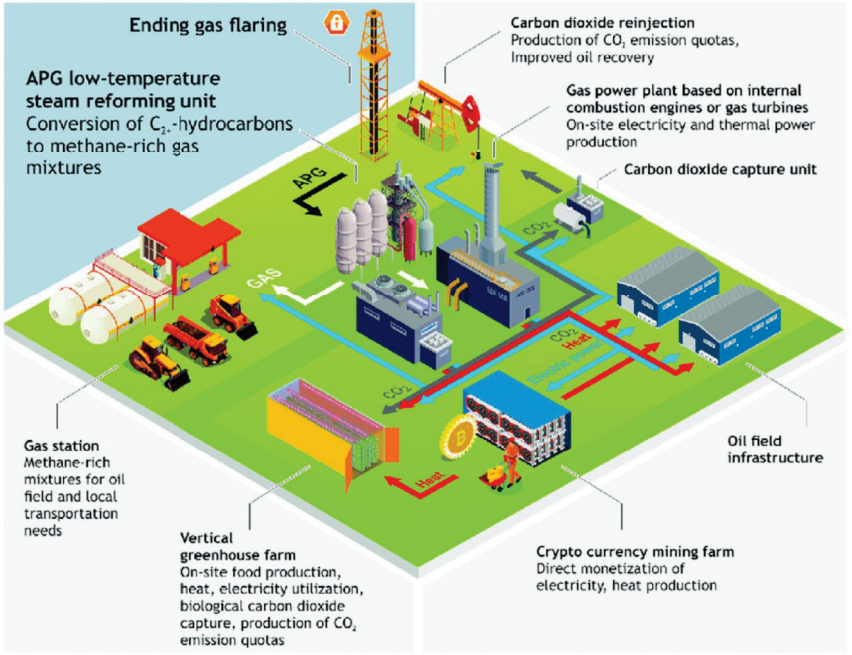
Oil-contaminated land will need to be remediated and brought back to use.

Setting up a training academy and an extension to the water treatment plant have all to be constructed, alongside a new electricity plant that provides power to the field and the local grid.

Bringing electricity into a remote household reduces the family expenditures for energy services (such as kerosene and mobile phone-charging costs} that can be replaced by direct electricity access. It also gives the family more time, due to electric lights and other appliances, which results in improvements in education, health, and communications; and it surely enhanced the productivity and income levels of the household.

> **Rural communities will benefit from affordable, reliable, and sustainable energy while also advancing human development, alleviating pollution, and curbing climate change."**

COMMUNITY ENGAGEMENT



Schematic diagram of flare gas on-site monetization

OVERVIEW ASSET BASE

OVERVIEW
PRODUCTION

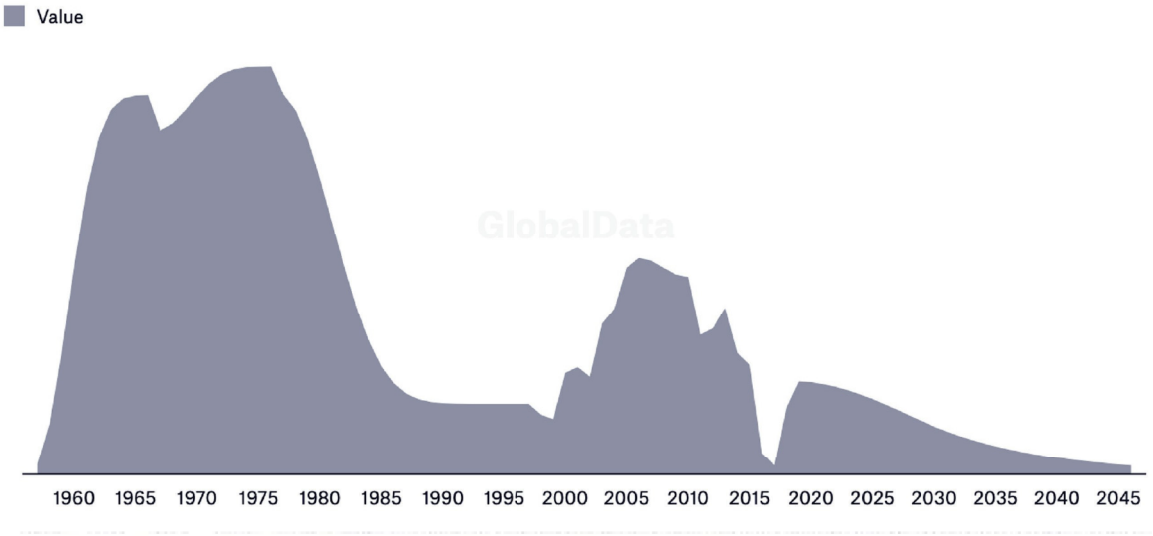
Production on OML 11 began in 1958 from the Afam field. Output peaked in 1973 at 233,000 b/d.

When the major civil unrest resulted in the shut-in of many fields, OML 11 was producing around 88,000 b/d.

We estimate that up to half of total liquids production is NGLs from the Afam and Bonny fields. The key fields on the block are Imo River, Obigbo North and Afam to the north, and the Bonny oil and gas field to the south.

OML 11 total production

Total production (boed)



Trans Niger Pipeline Loopline

In 2013, Final Investment Decision (FID} was taken for the construction of the Trans Niger Pipeline Loopline (TNPL}. The contract for the first phase of the project was finalised in July 2013, with Kaztec Engineering. The loopline will run from Ogale to the Bonny Terminal. It will consist of three parts - a 12.5 kilometre, 30 inch pipeline from Ogale to Eleme, a 22.5 kilometre 30 inch pipeline from Eleme to Ogo Bolo and a 20 kilometre 30 inch pipeline from the Cawthorne Junction Manifold to the Bonny Terminal. The loopline will offer an alternative route for crude transported to the Bonny Terminal and will reduce the crude losses and disruption associated from Bomu to Bonny. The total cost of the line is US$1.5 billion.

ESG CONSIDERATIONS

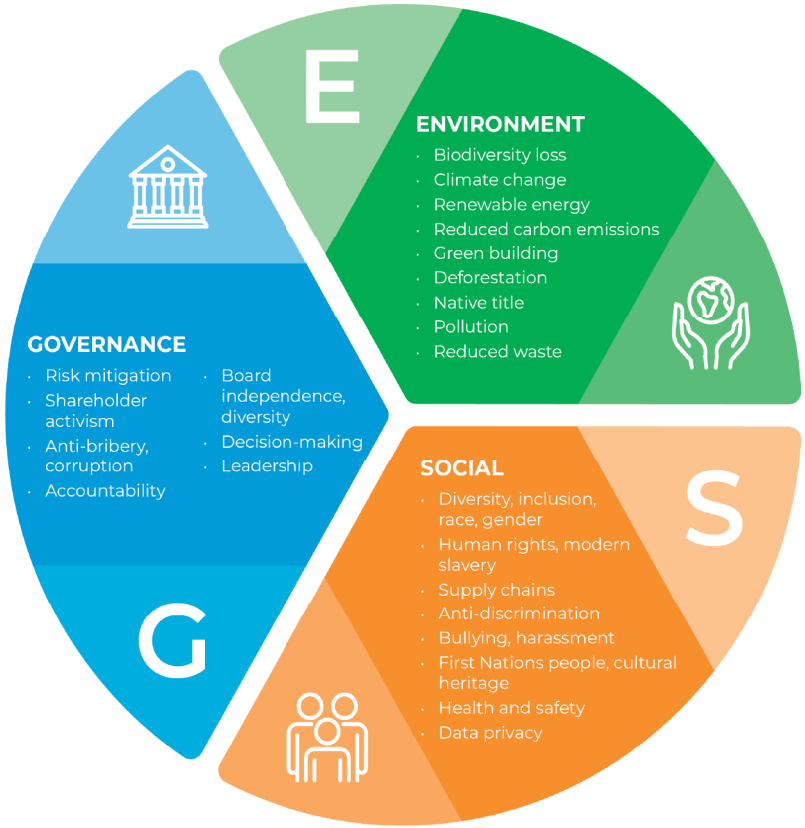
"To be an Enabler not an Emitter"

Your Business will Benefit by

- Providing **Secure & Reliable** Electricity & Oil/Gas
- Providing **Affordable** Electricity & Oil/Gas
- Transition to a **Renewable Source** of Electricity & Power

- **Improve** Your Reliability & Performance
- Become more Efficient
- **Future Proof** Your business (reduce risk}
- Become more Profitable & **Environmental compliant**

- **Attract & Retain** Talent / Employees
- Become a **DE&I** Leader
- Comply with ESG REPORTING PROTOCOL
- Publish Your Emissions
- Reduce Your Emissions
- Meet Your Client ESG demands/tenders/RFQ's
- Meet Your Supply Chain contractors' ESG requirements
- Qualify for FDI & Banking ESG requirements
- Give yourself a Competitive EDGE
- To ensure CONSUMER confidence & repeat business

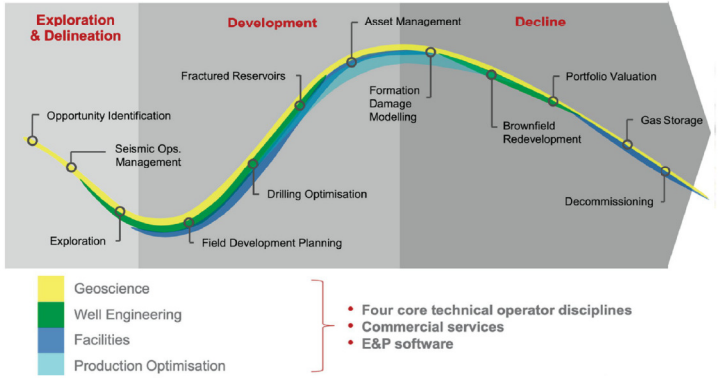


OPERATIONAL REQUIREMENTS

ENGINEERING, PROCUREMENT, CONSTRUCTION & DRILLING AGREEMENT (EPCD}

An established and highly experienced Well Engineering & Construction Project Management Service company to become its technical OPCO, to include the support of the following:

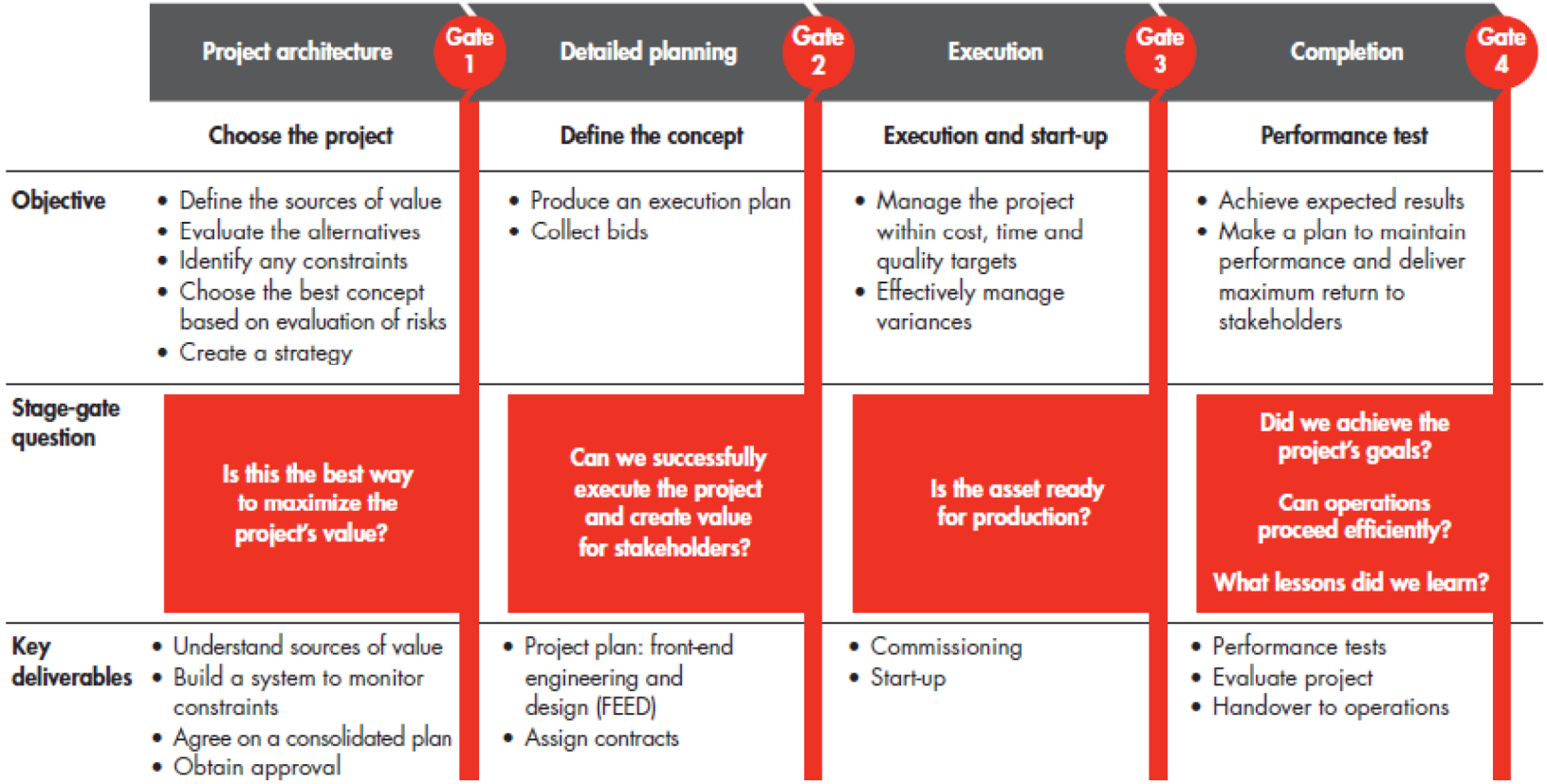
- Well integrity
- Well design and planning
- Well operator
- Drilling, Workover & Remedial
- EPC
- Flowline/Pipeline
- Construction
- Facilities Management
- Operations management
- Regulatory approvals
- Contracting
- Concept and detailed design
- Operational execution
- HSEQ management
- Training
- In Country Value
- Project accounting and cost tracking
- Project close-out



We believe in:
Strong and sustainable safety leadership
Continually raising standards to improve our health and safety performance
Effective management of integrity
Communicating internally and sharing Lessons across our industry
Ensuring our workforce is fully engaged

OPERATIONAL STRATEGY.next STEPS

Typical phases and stage gates of a major oil and gas infrastructure project. Recommendation to adopt a Pilot Phase philosophy



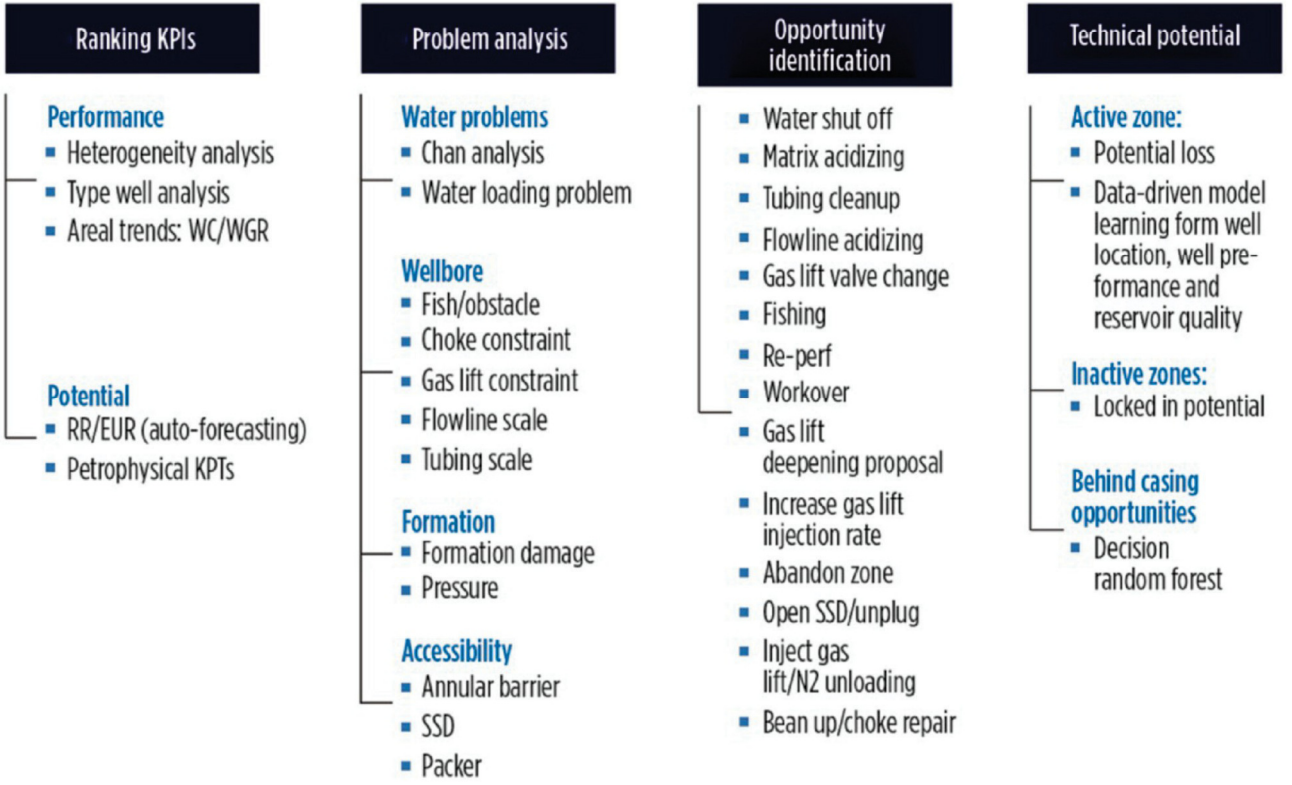
EXAMPLE OF REMEDIAL WORK SCOPE

Well workover or Intervention programs

Introduce new automation and data analytics technologies and a standard approach to well portfolio optimization for OML 11.

To Rank, Analyse, Identify and Risk assess all the wells in fields:

1. Setup knowledge base
2. technical screening
3. ranking (production analytics ranking}
4. problem analysis
5. opportunity identification
6. technical potential or gain estimation
7. risk assessment
8. historical success
9. economic analysis.



EXAMPLE OF EPF WORK SCOPE

The scope of work comprises provision of operation and maintenance contracts to build capacity by modularized early production facility (EPF} in the fields for expedited re-entry and resumption of oil and gas production activities in OML 11.

1. Preparation of site to receive Early Production Facility (EPF}

1. Engineering of site civil infrastructure to support EPF installation
2. Site civil works & Construction of support infrastructure

2. Hook-up Design, Installation and Commissioning of the EPF

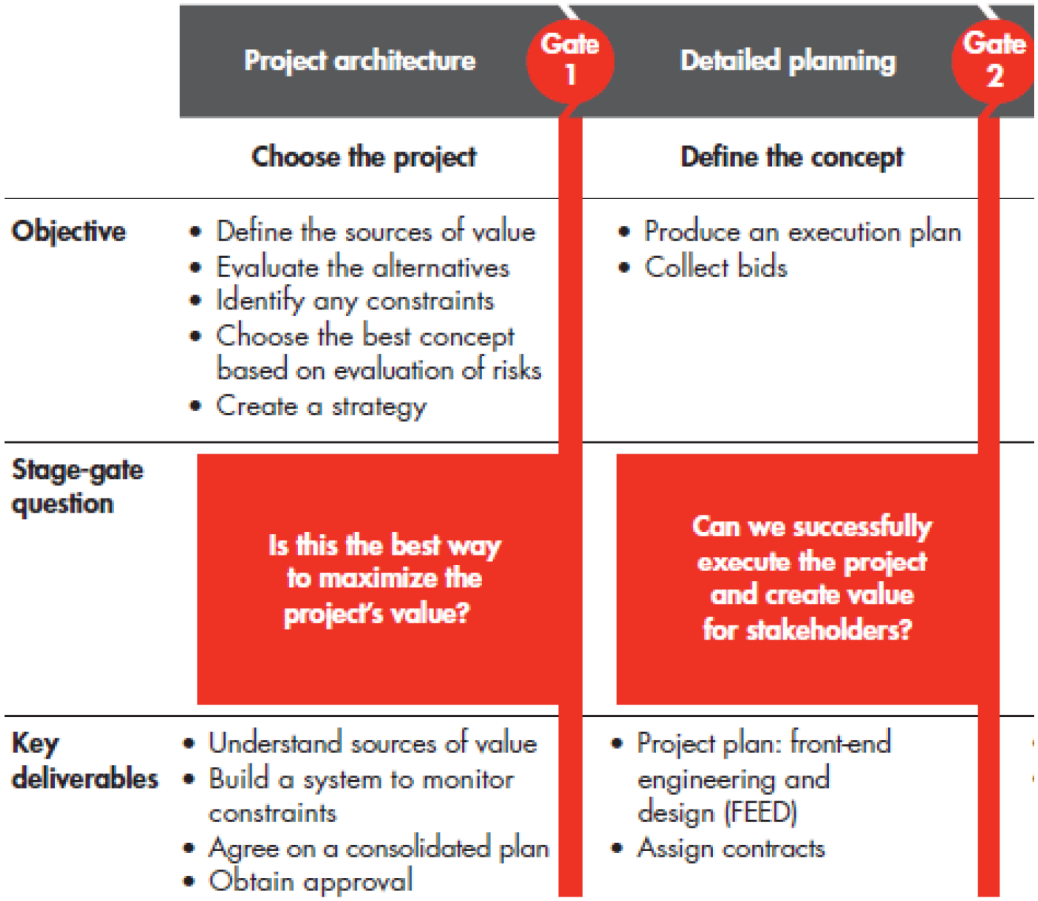
1. Engineering Design of the EPF
2. Mobilisation for installation and hook-up of the EPF
3. Supply of EPF (complete with inlet Manifold, Separators, Surge Tank, Export Pumps, Metering Skid, Flare System, Sampling & Testing Equipment, Power Systems and associated Equipment for two phase separation of produced crude and export into Trans Niger Pipeline Network}, supply of all materials, fabrication and completion of skidded or modularised packages comprising EPF and supply and fabrication of all necessary hook-up materials, pipe spools and components.
4. Site Installation and hook-up of the EPF ready for commissioning
5. Demobilisation after completion of hook-up of EPF
6. Commissioning and 90 day Performance Test

2. Supply, Operate & Maintain

1. Provision of adequate and competent personnel, tools, equipment, materials and consumables for the smooth and effective Operation and Maintenance of the leased Modularized Early Production Facility (EPF} to ensure production uptime in the field.

OPERATIONAL BUDGET

Typical phases and stage gates of a major oil and gas infrastructure project. Recommendation to adopt a Pilot Phase philosophy



To prepare and complete Stage Gates 1&2

Expected time - 3 months

{Jan-Mar 2026) Manpower -

18 full-time*

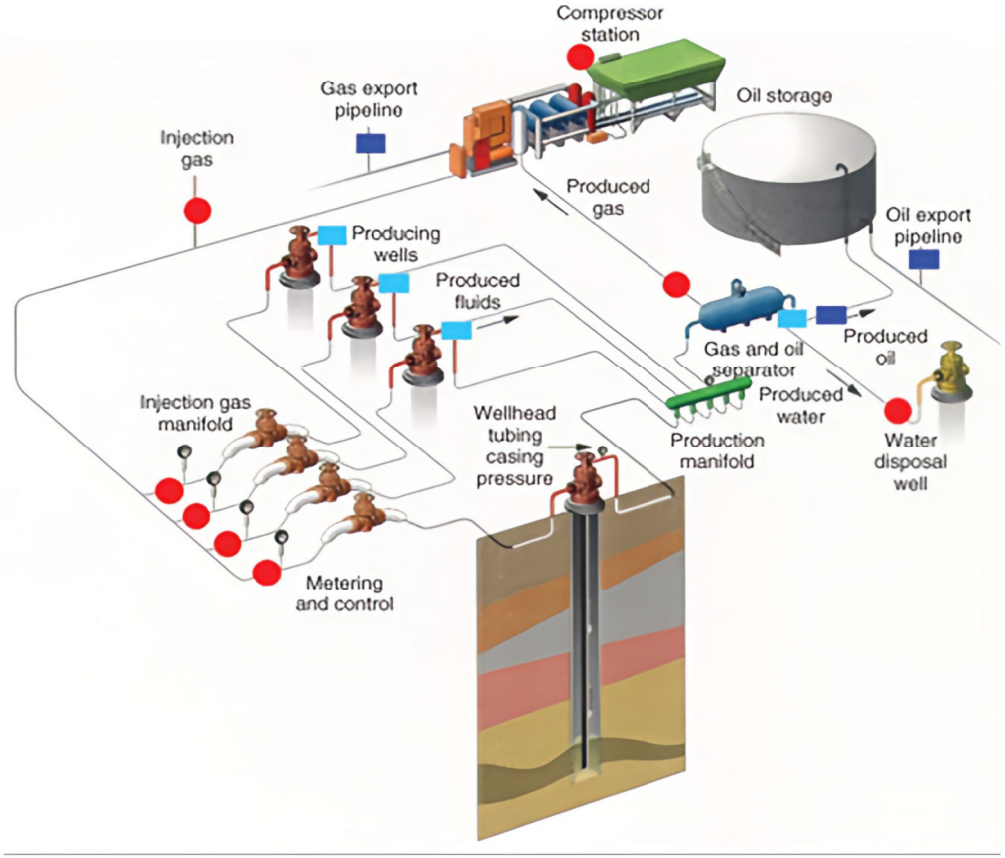
Requirements - office, admin, IT, business travel, PMO software

Budgeted approx. cost - $58m

Thereafter in the Operational Phase Gates 3&4

- proposed commercial terms will be as follows

OPERATIONAL BUDGET



To prepare and complete Pilot Project - Early Production #1

Expected time - 6 months {Apr-Oct 2026)

Wells - perform workover / remedial work on 10 wells to bring back on or increase production

Facilities - repair / upgrade production facilities and process plant to accept the production from the 10 wells.

Pipeline - repair / upgrade pipeline / loopline / trunklines network for distribution to off-take hub - storage or port terminal

Based on the proposed Production Ramp-up Model*

Cumulative Rev	$ 162,000,000.00
Cumulative Production bbls	1,800,000.00
Cumulative OPEX	$ 51,300,000.00
Cumulative Profit Before Tax	$ 110,700,000.00

Budgeted approx. cost

10 Wells - $36.0M
Facilities - $18.0M
Pipeline - $18.0M

Total CAPEX requirement - $72.0M

OPERATIONAL BUDGET

Budget Revenue

No of Wells	Exp Production Rate (bbl/d)	Exp Production Vol (bbl/d)	Price per Barrel	Rev per day	Rev per month
2	2000	4,000.00	$ 90.00	$ 360,000.00	$ 10,800,000.00
4	2000	8,000.00	$ 90.00	$ 720,000.00	$ 21,600,000.00
6	2000	12,000.00	$ 90.00	$ 1,080,000.00	$ 32,400,000.00
8	2000	16,000.00	$ 90.00	$ 1,440,000.00	$ 43,200,000.00
10	2000	20,000.00	$ 90.00	$ 1,800,000.00	$ 54,000,000.00

BRENT CRUDE OIL: LATEST PRICE AND CHART

Ramp Up Schedule

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Wells	Start	2	4	6	8	10
Production bbl/d	0	4,000.00	8,000.00	12,000.00	16,000.00	20,000.00
Production bbl/per month	0	120,000.00	240,000.00	360,000.00	480,000.00	600,000.00
Revenue	0	$ 10,800,000.00	$ 21,600,000.00	$ 32,400,000.00	$ 43,200,000.00	$ 54,000,000.00
Cumulative Rev	0	$ 10,800,000.00	$ 32,400,000.00	$ 64,800,000.00	$ 108,000,000.00	**$ 162,000,000.00**
Cumulative Production bbls		120,000.00	360,000.00	720,000.00	1,200,000.00	**1,800,000.00**

CAPEX Costs Schedule

Wells	Start	2	4	6	8	10	Total
Workover/Remedial	$ 6,000,000.00	$ 6,000,000.00	$ 6,000,000.00	$ 6,000,000.00	$ 6,000,000.00	$ 6,000,000.00	$36M
Facilities & Process Plants	$ 3,000,000.00	$ 3,000,000.00	$ 3,000,000.00	$ 3,000,000.00	$ 3,000,000.00	$ 3,000,000.00	$18M
Pipeline, Trunkline to port	$ 3,000,000.00	$ 3,000,000.00	$ 3,000,000.00	$ 3,000,000.00	$ 3,000,000.00	$ 3,000,000.00	$18M
Tranches	**$ 12,000,000.00**	**$ 12,000,000.00**	**$ 12,000,000.00**	**$ 12,000,000.00**	**$ 12,000,000.00**	**$ 12,000,000.00**	
Petroluem Inv Allowance 5%	$ 600,000.00	$ 600,000.00	$ 600,000.00	$ 600,000.00	$ 600,000.00	$ 600,000.00	
TOTAL CAPEX						**$ 72,000,000.00**	

OPEX Cost Schedule

Wells	Start	2	4	6	8	10
Royalty 20%		$ 2,160,000.00	$ 4,320,000.00	$ 6,480,000.00	$ 8,640,000.00	$ 10,800,000.00
NDDC Levy 3%		$ 324,000.00	$ 648,000.00	$ 972,000.00	$ 1,296,000.00	$ 1,620,000.00
Ed Tax 2%		$ 216,000.00	$ 432,000.00	$ 648,000.00	$ 864,000.00	$ 1,080,000.00
Lifting Costs - $6 per bbl		$ 720,000.00	$ 1,440,000.00	$ 2,160,000.00	$ 2,880,000.00	$ 3,600,000.00
TOTAL		**$ 3,420,000.00**	**$ 6,840,000.00**	**$ 10,260,000.00**	**$ 13,680,000.00**	**$ 17,100,000.00**
Cumulative OPEX						**$ 51,300,000.00**

Gross Profit *Before Tax

Wells	$ 7,380,000.00	$ 14,760,000.00	$ 22,140,000.00	$ 29,520,000.00	$ 36,900,000.00
%	68.33%	68.33%	68.33%	68.33%	68.33%
Cumulative GP					**$ 110,700,000.00**
CAPEX repayment					$ 72,000,000.00
Overall GP margin					**$ 38,700,000.00**