

Scenario Planning & Risk Assessment in a Low Oil price environment

West Qurna-2 Upstream Project

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May 2018, Istanbul, Turkey

LUKOIL at Glance

> Vertically integrated business

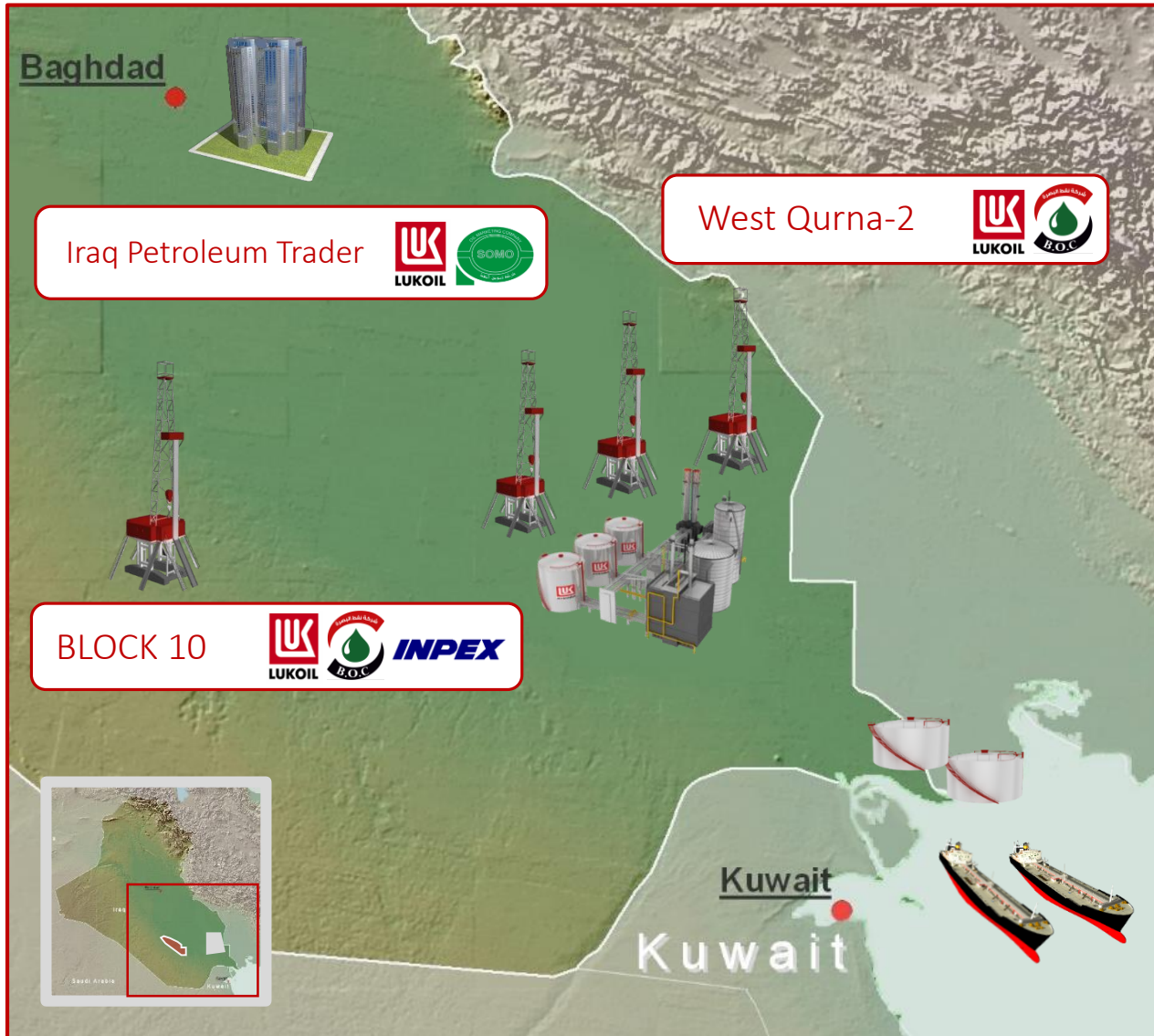
- >30 countries
- 16 bln boe proved reserves
- 39 bln boe reserves and resources (3P+3C)
- 2.2 Mboepd production
- 1.4 Mboepd refinery throughput

> 2017 financial results:

- EBITDA \$14.2 bln
- FCF \$4.2 bln



LUKOIL in Iraq



1

2010

West Qurna-2

DPSC effective date January 2010
Contract term 25 years
Start of production March 2014
Production growth 400 kbpd
Share of Iraqi oil production 9%
Share of Iraqi oil export 12%

2

2013

Block 10

EDPSC effective date December 2012
Contract term 30 years
Major discovery February 2017

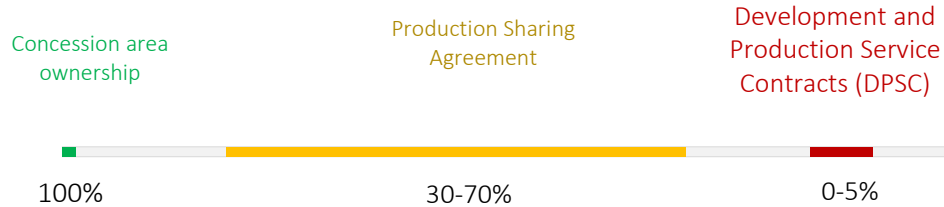
3

2017

Trading of Iraqi crude

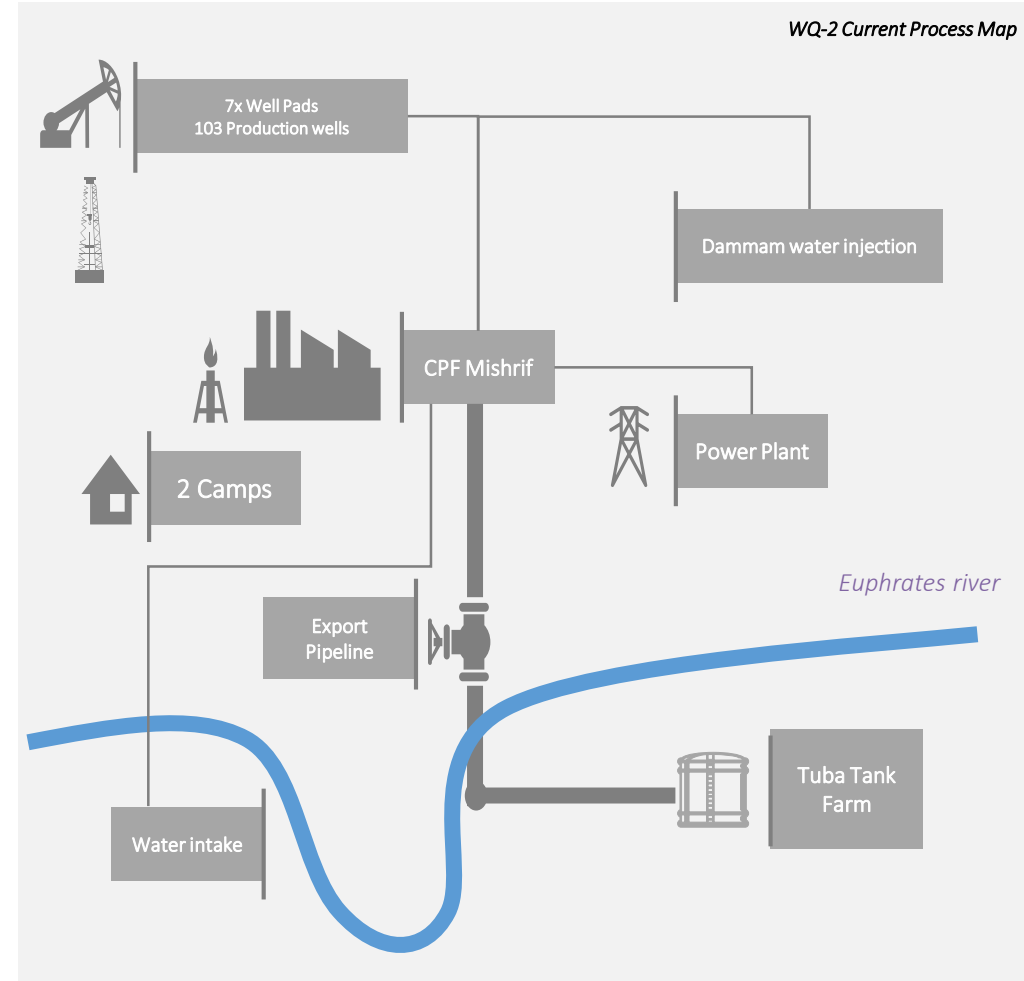
JV LITASCO and SOMO (IPT)
Shipment volumes in 2017 19 mln bbl

West Qurna-2 Project at Glance

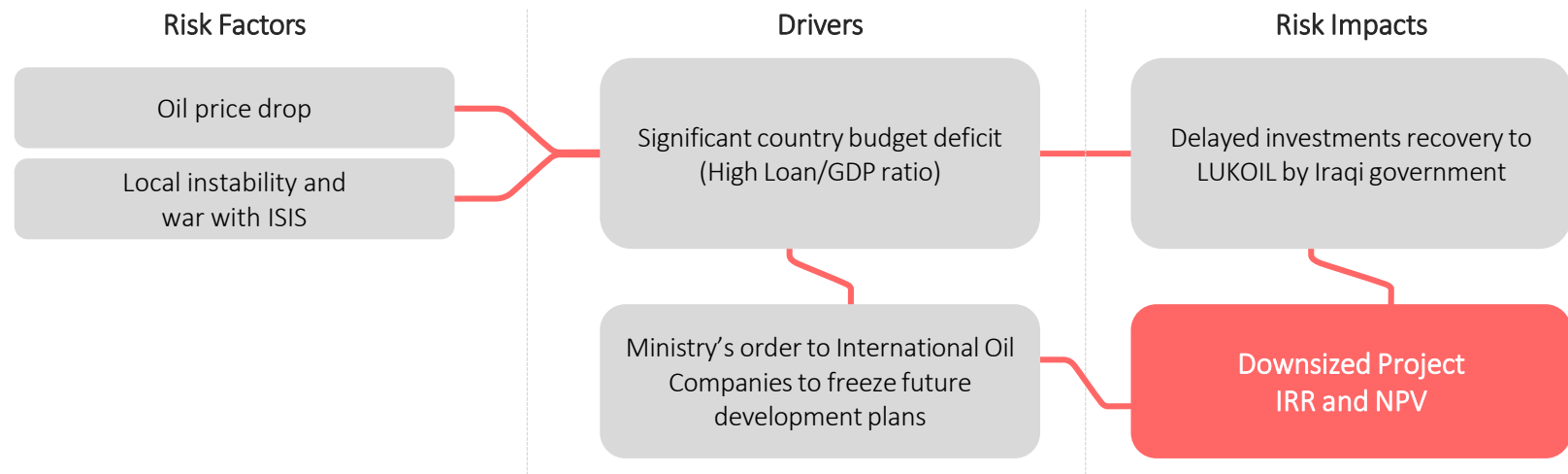
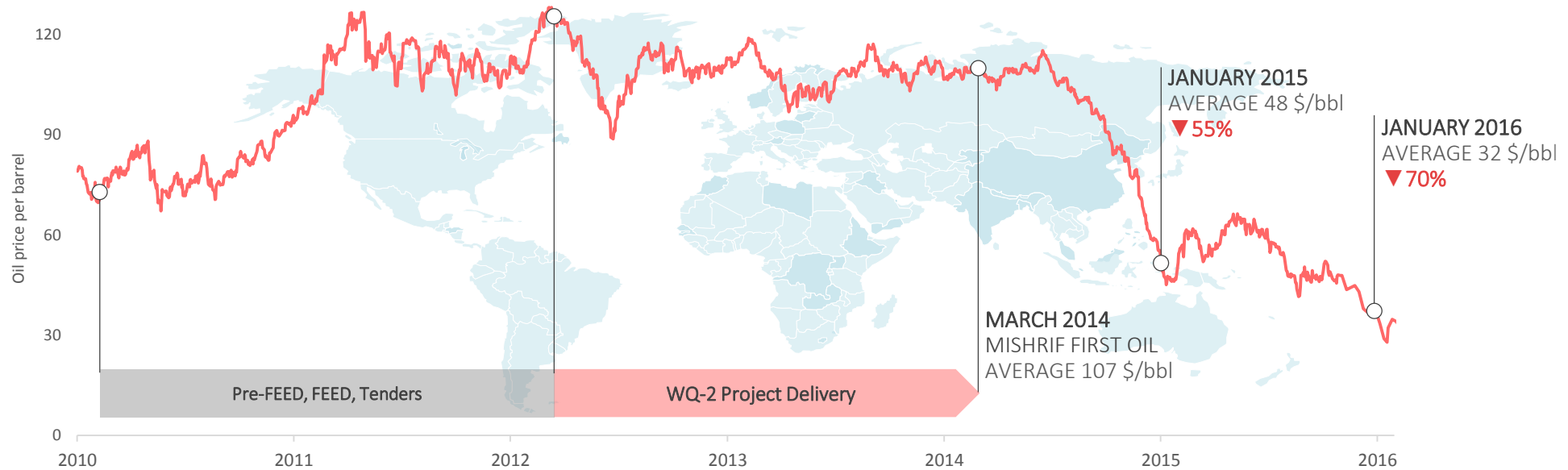


Controllability and manageability range for Oil Operators within different development regimes. The range reflects Operator's ability to control and recover revenues and run procurement activities.

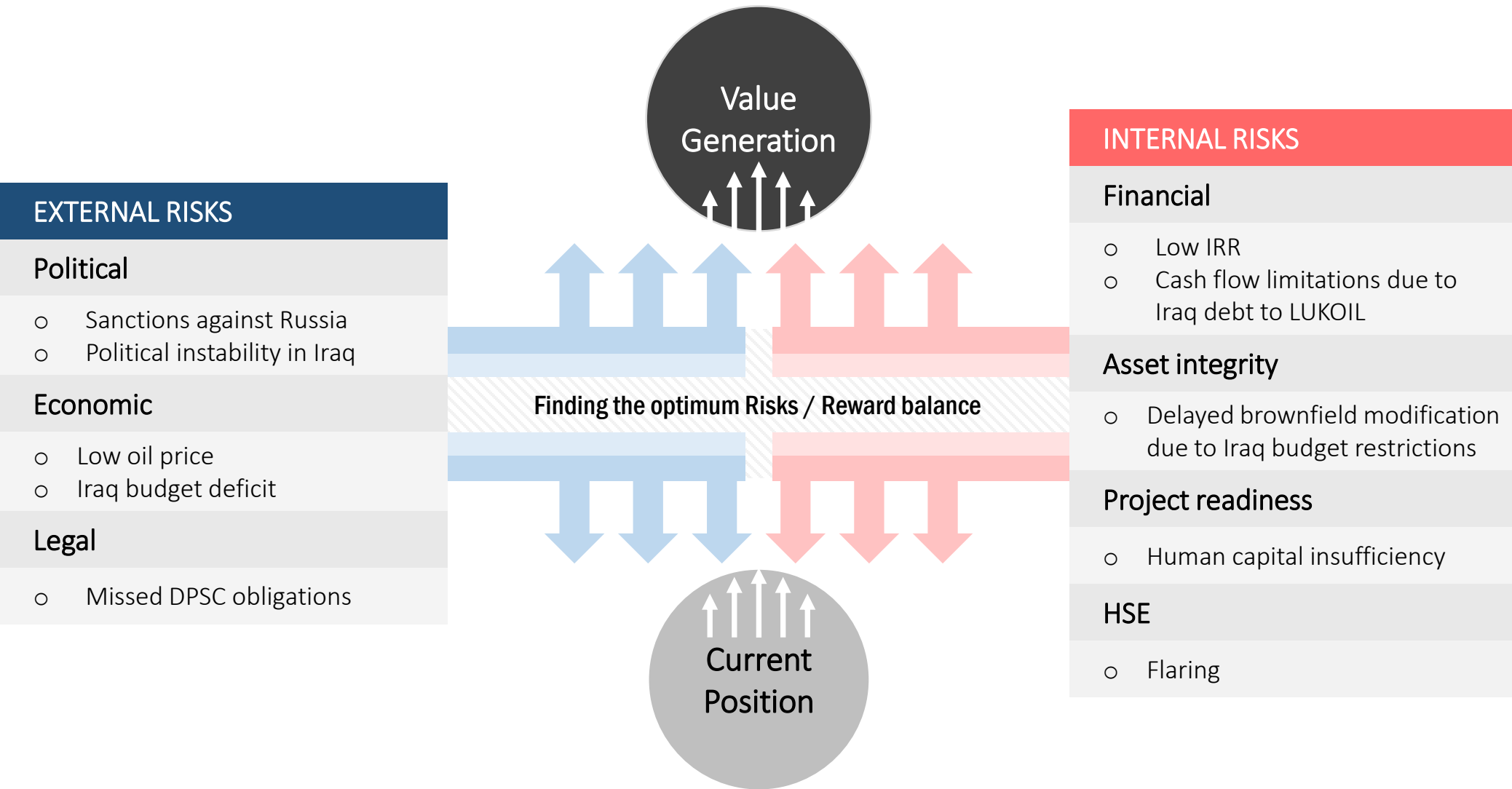
IPA rated WQ-2 project as **Top 10%** capital projects worldwide for timely project delivery.



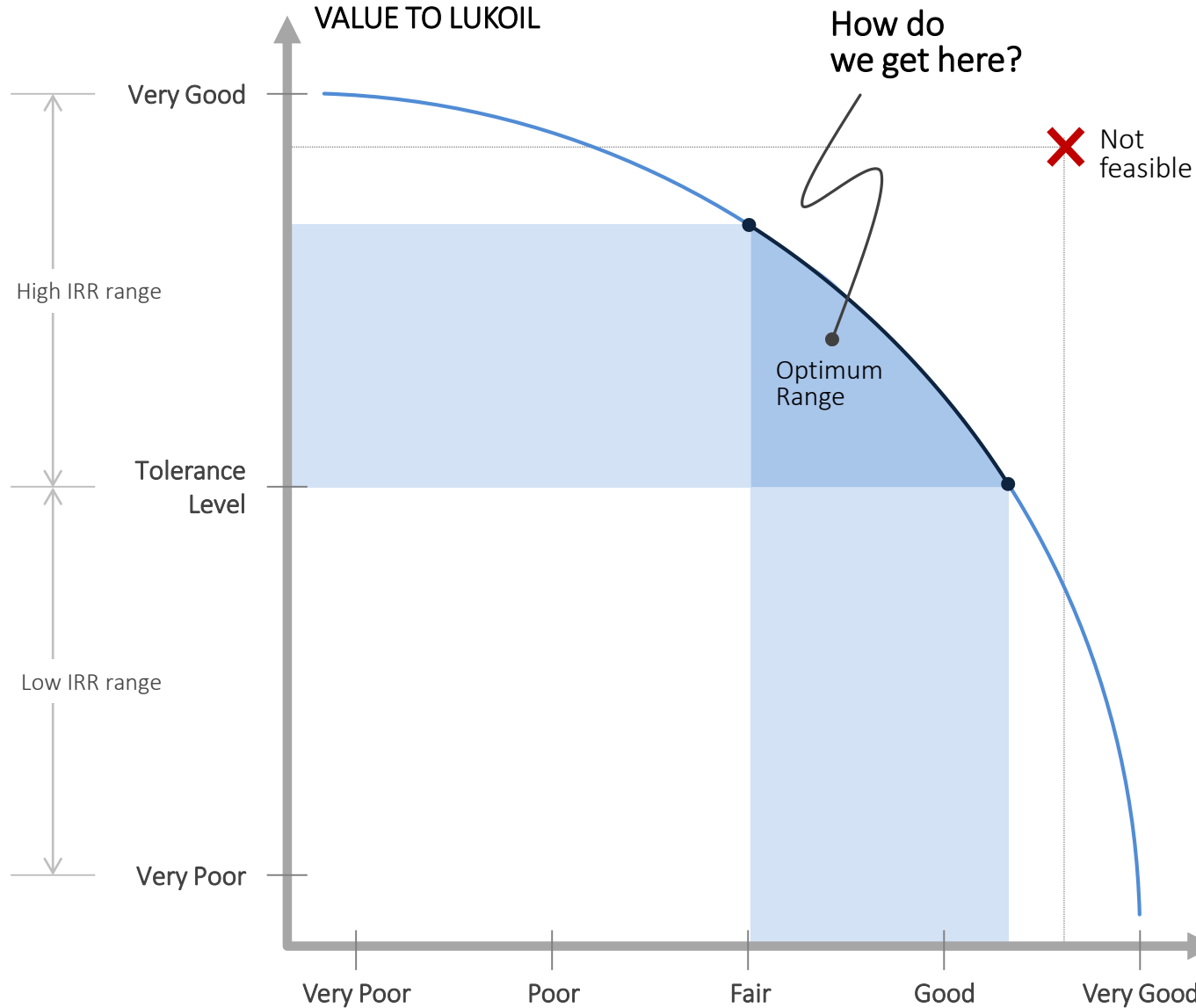
WQ-2 Risks Factors & Drivers within Low Oil Prices



WQ-2 Risk Environment



Framework of Finding Risk / Reward Balance



DPSC Requirements

- 1 Gas Utilization
- 2 Production Ramp up
- 3 Export Infrastructure

Rating	Schedule Criteria
Very Good	Meeting all requirements (4/4)
Good	Meeting 3 out of 4
Fair	Meeting 2 out of 4
Poor	Meeting 1 out of 4
Very Poor	Not meeting any

Scenario Planning as a Tool



Steps

Framing

Planning & Scheduling

Assessment

Modeling

Final analysis, Presentation & Reporting

Activities

- Brainstorming and task setting
- Production target
- Financial requirements
- Risk profile target

- Projects prioritization
- Contracting strategy
- Construction and drilling schedule
- Separate items cost and schedule risk analysis

- Power supply/demand analysis
- Water treatment facilities phasing
- Gas treatment options
- Manpower planning

- Surface and subsurface production modeling and calculations
- Capex and Opex calculations
- Financial-Economic Modelling

- Sensitivity analysis
- Overall scenario analysis and risk assessment
- Management review
- Decision making

Risks, Uncertainties,

Variable parameters

- Facilities capacity phasing
- Risk tolerance
- Production requirements
- Business case opportunities
- Stress cases

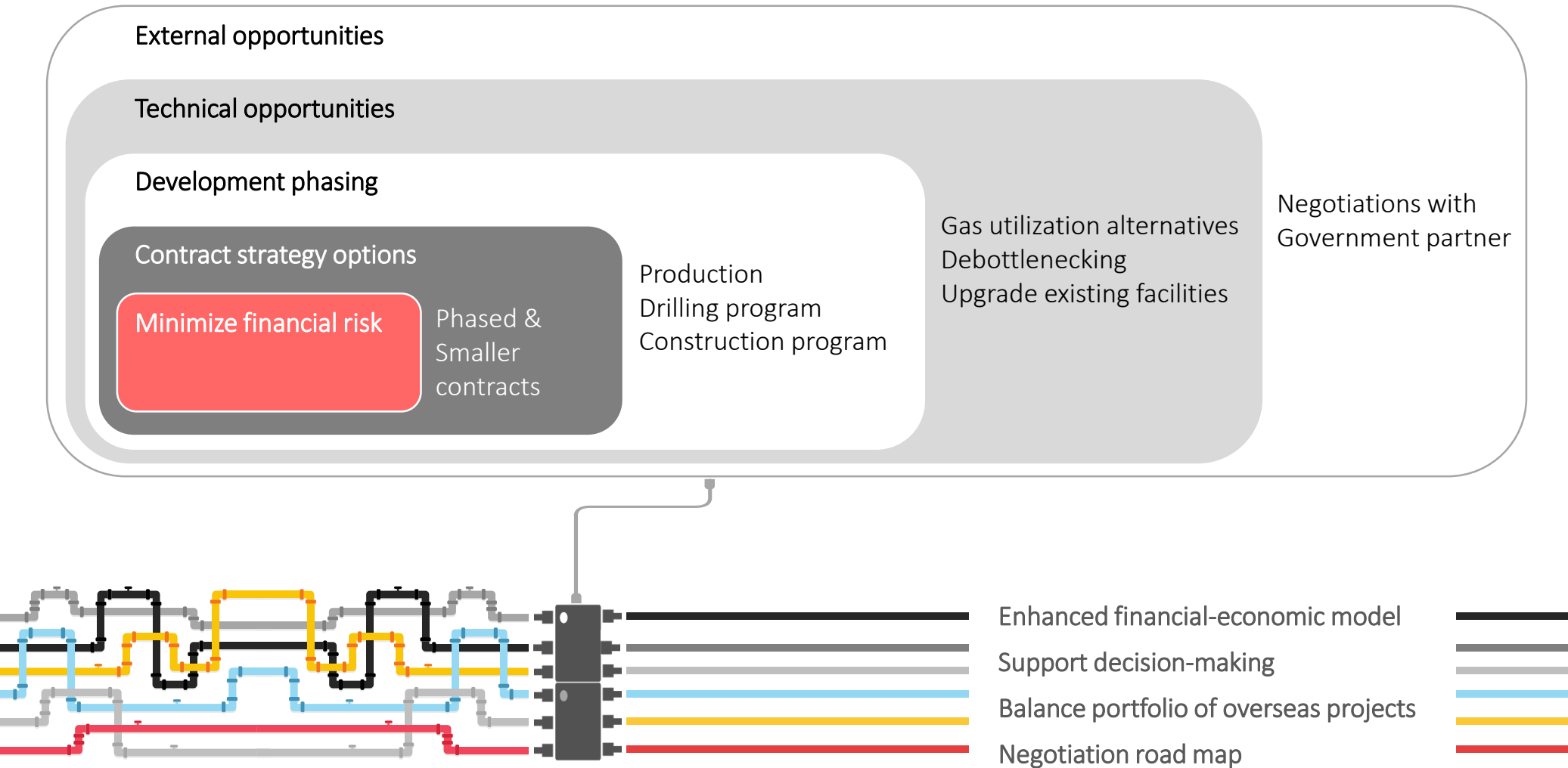
- Construction and Drilling delays
- Tendering delays
- Technical interfaces

- Temporary power requirements
- Watercut level forecast
- Production limitations
- Hiring delays

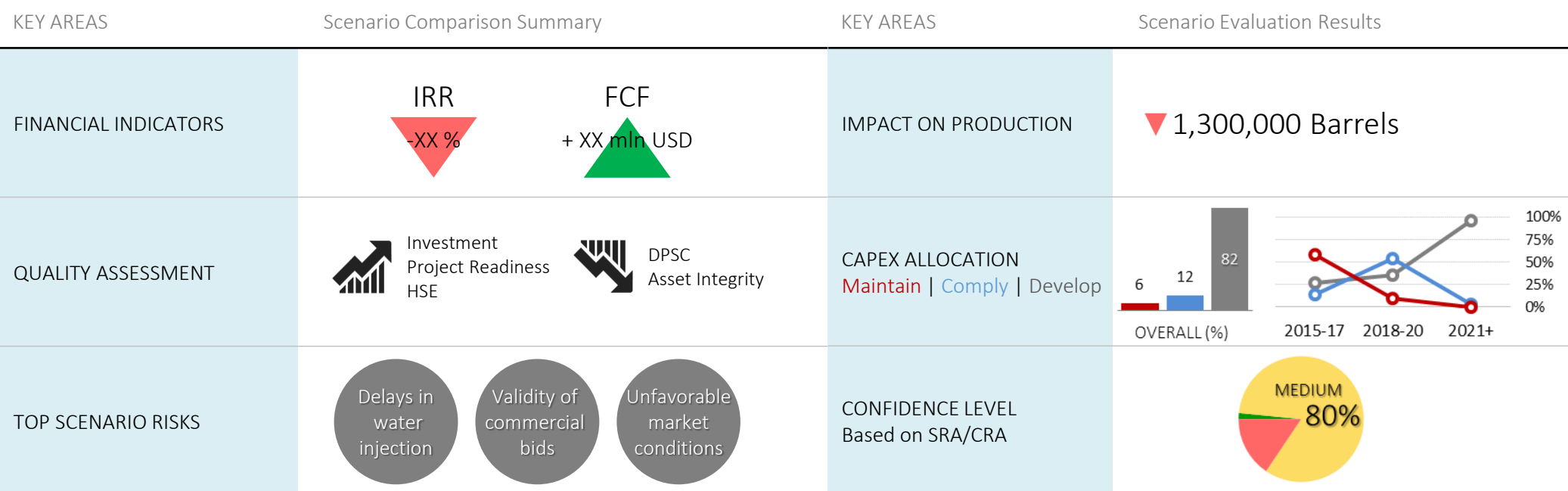
- Reservoir parameters (Oil pressure, H2S content)
- Production forecast
- Capex
- Oil price
- Reimbursement delays

- Acceptable risk level
- Mitigation actions

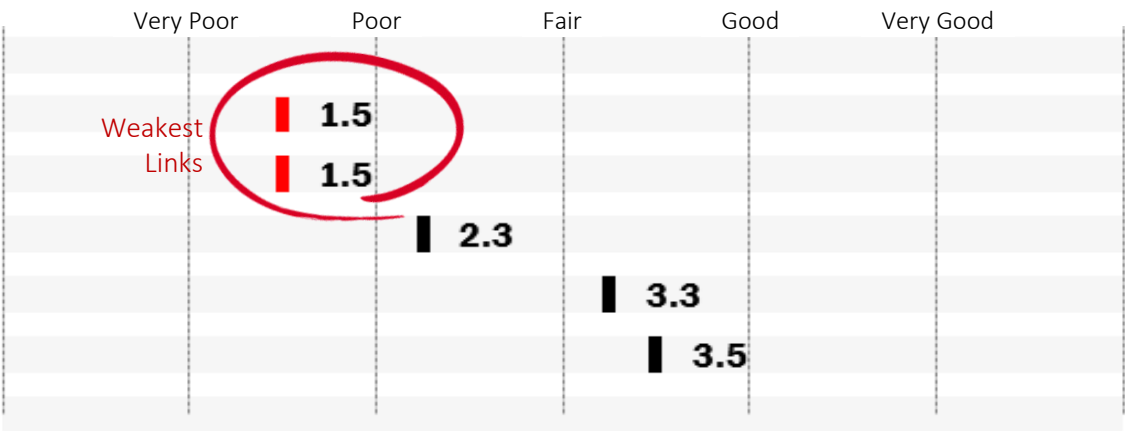
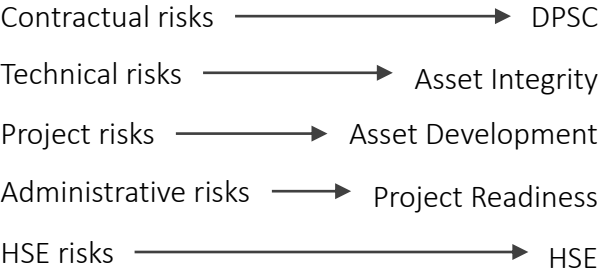
Scenario Planning Outcomes



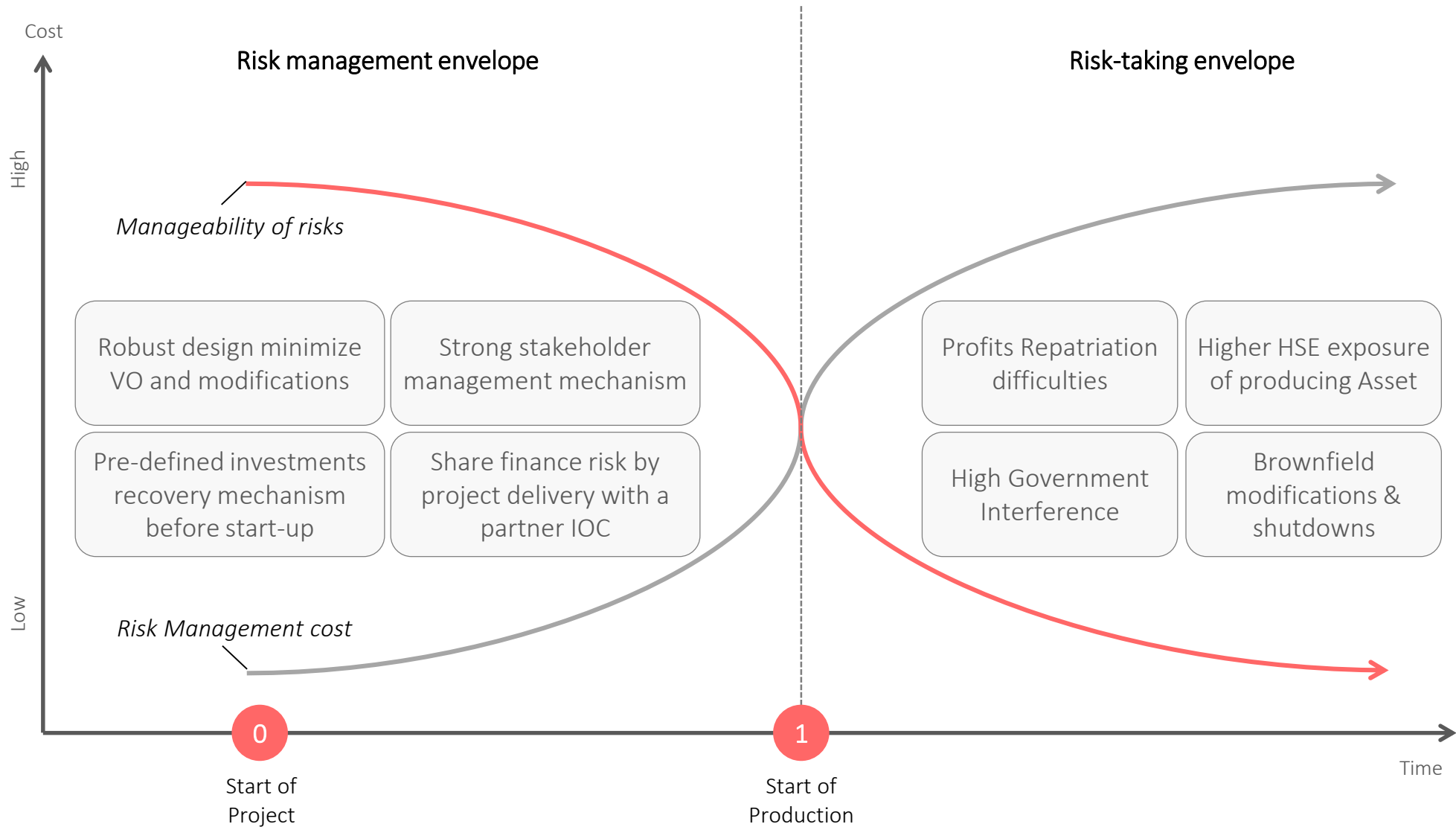
Sample Scenario Evaluation



Categorization and quantification of each scenario based on risks and opportunities:



Managing Risks for International Oil Company





THANK YOU FOR YOUR ATTENTION