Overview of Oil and Gas Prospects in Lebanon

American University of Beirut

10 October 2013
Eastern Mediterranean Levant Basin

- Frontier Hydrocarbon province: well covered with the Geophysical data and under-explored
- Recent gas discoveries of 35 Tcf
- Europe yearly demand in 2020 estimated at 20 Tcf
- 35 Tcf = 8% of the European demand in 2020 for 20 years
Lebanon’s O&G Sector Development

- **Offshore Petroleum Resources Law**
- **PA Decree**
- **PA Appointment**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>2010</td>
<td>Offshore Petroleum Resources Law</td>
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<tr>
<td>2011</td>
<td>PA Decree</td>
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<tr>
<td>2012</td>
<td>PA Appointment</td>
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<tr>
<td>2013</td>
<td></td>
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<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
</tr>
<tr>
<td>2044</td>
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</table>
O&G Sector Governance

Petroleum Administration appointed on 04 December 2012

N.B: Board members are department heads
LPA Responsibilities

- Promote the potential petroleum resources
- Evaluate the qualifications and capabilities of bidders
- Prepare invitations to bid, specifications, relevant permits and agreements
- Support in negotiation of the terms of agreements
- Manage, follow up, supervise, and monitor all petroleum activities
- Evaluate plans for field development, petroleum transportation, decommissioning, and removal of facilities.
- Manage the data associated with the petroleum activities.
- Handle and manage the petroleum register.
Licensing Strategy - Inputs

- Legal System
- Organizational Capacity
- Risks
- Economic Growth
- Scope & Frequency of Bid
- Sustainability
- Bidding Conditions

Licensing Strategy
2D and 3D Offshore data

- 2D : 8,800 L-Km
- 3D : 10,000 Km2

- 2D : 5,200 L-Km
- 3D : 5,145 Km2

- 2D : 1,650 L-Km
  Planned in
  July 2013

Interpreted:
- 2D : 10,000 L-Km
- 3D : 2,200 Km2
- 3D due Oct-2013 : 4300 Km2
Block Delineation

<table>
<thead>
<tr>
<th>Block</th>
<th>Block Km²</th>
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<tbody>
<tr>
<td>1</td>
<td>1.928</td>
</tr>
<tr>
<td>2</td>
<td>1.924</td>
</tr>
<tr>
<td>3</td>
<td>2.048</td>
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<tr>
<td>4</td>
<td>2.030</td>
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<tr>
<td>5</td>
<td>2.374</td>
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<tr>
<td>6</td>
<td>1.721</td>
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<tr>
<td>7</td>
<td>1.259</td>
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<td>8</td>
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<td>9</td>
<td>1.742</td>
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<tr>
<td>10</td>
<td>1.475</td>
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Pre-Qualification Criteria

**RIGHT HOLDER - OPERATOR**

**Legal**
- Joint stock company conducting Petroleum Activities

**Financial**
- Total assets of USD 10 Billion

**Technical**
- Operatorship of at least one petroleum development in water depths in excess of 500m

**QHSE**
- QHSE policy statement(s)
- Established & implemented QHSEMS

**RIGHT HOLDER – NON-OPERATORS**

**Legal**
- Joint stock company conducting Petroleum Activities

**Financial**
- Total assets of USD 500 Million

**Technical**
- Having an established petroleum production

**QHSE**
- QHSE policy statement(s)
- Established & implemented QHSEMS
## Key Roles & Responsibilities of Parties

<table>
<thead>
<tr>
<th>RIGHT HOLDER OPERATOR</th>
<th>RIGHT HOLDER NON-OPERATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing the day-to-day field operations on behalf of other right-holders:</td>
<td>Participate in the Managing Committee of the Consortium along with the operator and other right-holders providing:</td>
</tr>
<tr>
<td>- Design and execute the exploration programme</td>
<td>- Co-financing the project</td>
</tr>
<tr>
<td>- Well design, drilling, completion, production</td>
<td>- Commercial and marketing activities</td>
</tr>
<tr>
<td>- Engineering, infrastructure and facilities construction and maintenance</td>
<td>- Technical input</td>
</tr>
<tr>
<td>- Services and logistics</td>
<td>- Regulatory role</td>
</tr>
<tr>
<td>- Represents the consortium</td>
<td></td>
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</table>
### Pre-Qualified Companies

<table>
<thead>
<tr>
<th>Category</th>
<th>Applicants</th>
<th>Qualified</th>
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</thead>
<tbody>
<tr>
<td>Right Holder - Operator</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Right Holder – Non-Operator</td>
<td>38</td>
<td>34</td>
</tr>
</tbody>
</table>

The Countries that Submitted the Pre-qualification Application

- Anadarko
- BR Petrobras
- Chevron
- ExxonMobil
- Eni
- MAERSK
- Repsol
- Shell
- Statoil
- INPEX
- PETRONAS
- Total
Process Transparency

- Publishing Evaluation Criteria
- Publishing the List of Applicants
- Responding to Clarifications
- Posting and Distributing FAQ
- Clarification with IOCs during Evaluation
- Publishing the List of Pre-qualified Companies
Nominated Blocks for Bidding

* Subject to Council of Ministers’ Approval
**Licensing Strategy & Timeline**

- **Q4 - 2012**: Approval of 1st Round Plan 27-12-2012
- **Q1 - 2013**: Open Pre-qualification 15-02-2013
- **Q2 - 2013**: List of Pre-qualified companies 18-04-2013
- **Q3 - 2013**: Companies Nominate Blocks 15-06-2013
- **Q4 - 2013**: Decrees Approval (EPA, Tender Protocol, Blocks) 10-01-2014
- **Q1 - 2014**: Close Bid Round 28-03-2013
- **Q2 - 2014**: Open Bid Round 02-05-2013
- **Q3 - 2014**: EPA Workshop with Companies 17/18-06-2013
- **Q4 - 2014**: Companies Comment on EPA 01-06-2013
- **Q1 - 2015**: Bid Evaluation Results Jan 2014
- **Q2 - 2015**: Negotiations & Award Feb-Mar 2014
Contract - Key Objectives

- Favoring long-term investment
- Long-term partnership
- Energy independence
- Revenues for future generations
- Opportunity for Lebanese service providers
- Employment and Training
- Environmental Protection
The Partners

Exploration and Production Agreement (EPA)

- At least three Right Holders at all times (OPR Law Requirement)
- No State Participation Interest in First Round EPAs
- State role is to receive share of production, and to exercise approval rights
- Some decisions reserved by OPR Law to Council of Ministers. Others made by Minister, acting on recommendation of Petroleum Administration.
Phases: Overview

- **Exploration Phase** of six years
  - Divided into two Exploration Periods, three years and two years extendable for one year
  - 25% relinquishment at end of first period
  - Minimum work commitments
  - Exploration Phase can be extended for justified operational reasons or Event of Force Majeure, subject to Council of Ministers approval, 50% relinquishment
  - Discovery must be promptly reported to PA
  - Right Holders indicate if Natural Gas or Crude Oil, and whether Potentially Commercial
  - If Potentially Commercial, Right Holders must submit Appraisal Plan
  - Right Holders to decide on Declaration of Commerciality after Appraisal Period

- After Declaration of Commerciality, Right Holders submit Development and Production Plan
  - Plan is subject to Council of Ministers approval
  - 25 year Production Phase, possible 5-year extension
  - If approved, Right Holders must achieve first Commercial Production by agreed deadline
Procurement

- General rule: competitive tenders
- Lebanese contractors are given preference:
  - Services – price less than 110% of foreign competitor
  - Goods – price less than 105% of foreign competitor
- Minister approval: affiliate contracts/contracts above US$5 M per year or US$10 M overall

Employment and Training

- Recruitment and training program for Lebanese nationals mandatory
- At least 80% of employees must be Lebanese nationals
- Plans must include program for hiring Lebanese nationals as management and professional staff
QHSE Considerations

- Occupational Health
- Public Health
- Medical Evacuation

- Safety Cases
- HSE Plans
- Emergency Preparedness & Response Plans

- Management Systems
- Quality Plans
- Audits & Inspections
- CSR

- SEA / EIA
- Oil Spill Plans
- Environmental Monitoring

- Environment
- Safety
- Quality
- Health
Production Sharing Agreement (PSA)

- Total Oil Produced
- Royalty
- Cost Recovery Oil
- Profit Oil
- Contractor Share of Profit Oil
- Government Share of Profit Oil
- Corp. tax
- Sovereign Fund
- Cost
- Company Profit
- Government Take
Activities & Cash Flow (oil profile)

Income

Costs

Pre-license | Exploration | Development | Production | Production Enhanced | Abandonment

Time

Government
The net proceeds collected or received shall be placed in **Sovereign Fund**

Specific Law regulating:
- the Fund
- the management
- principles of investment
- use of proceeds
Thank You