TUNISIA E&P ACTIVITIES AND NEW VENTURE OPPORTUNITIES IN OIL & GAS SECTOR
Outline of the Presentation

• 1- About Tunisia
• 2 - Geological Provinces
• 3 - Tunisia Attractiveness
• 4 - ETAP Portfolio
• 5 - E&P Activities in Tunisia
• 6 - How to Explore in Tunisia
• 7 - Tunisia Infrastructure
• 8 – Development Projects
Strategic location in Central Mediterranean Sea
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About Tunisian Geology

Diversified Geological Provinces:

- Thrust belt in the Northern Onshore & Offshore
- Pelagian Platform (eastern Tunisia) Onshore & Offshore
- Atlasic Zone (Western Onshore)
- Saharan Platform (Sag Basin) Ghadames Basin
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ETAP, the National Oil Company of Tunisia focusing on upstream activity in Tunisia, has several other JV Companies.
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About ETAP

ORIGIN OF O&G INVESTORS IN TUNISIA

- EUROPE
- USA
- AUSTRALIA
- ASIA
- CANADA
- EASTERN EU
- MIDDLE EAST
- TUN. PRIVATE
- NORTH AFRICA
- TUNISIA JV

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ETAP Partners

About 60 exploration companies working in Tunisia
OPEN BLOCKS
POTENTIAL RESERVOIRS: Oligo-Miocene sandstones, Ypresian and Upper Cretaceous fractured limestones: Belli, maamoura, zinnia fields

SOURCE ROCKS: Albian, Upper Cenomanian - lower Turonian, Ypresian
POTENTIAL RESERVOIRS: Lower Cretaceous sandstones, Upper Senonian fractured limestones, Aptian dolomitic limestone: sidi el Kilani, Ashtart, Mahdia, Hasdrubal fields
SOURCE ROCKS: A middle Jurassic, Albian, Upper Cenomanian - lower Turonian, Ypresian
SOUTHERN OPEN BLOCKS

NEW DISCOVERY:
CAT-1 tested 4500 BO, May 2015, First Well of MAZARINE Energy
From the Lower Ordovician fractured sandstones

POTENTIAL RESERVOIRS: Triassic sandstones, Upper Silurian sandstones, Ordovician fractured Quartzite, Cambrian Sandstones: El Borma, Nawara, Franig, baguel Fields

SOURCE ROCKS: Lower Silurian Tanazuft and Upper Silurian -Lower Devonian Feguaguira Hot Shales
Mazarine Energy (Netherlands) MEDEX & ETAP discovered 38m of net oil-bearing reservoir in Chouchet El Atrous-1 (Cat-1) well in the Zaafrane permit,
The main objective of well Cat-1 was to test the hydrocarbon potential of the Ordovician El Hamra and El Atchane Formations.
Extensive logging and sampling proved the El Hamra and El Atchane sands to contain 19m and 19m of net pay respectively
Evolution of Number OfPermits

<table>
<thead>
<tr>
<th>Year</th>
<th>onshore</th>
<th>offshore</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td>30</td>
</tr>
<tr>
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<td>2013</td>
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<td></td>
<td>30</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>
EXPLORATION DRILLING 2000-2014

- Total
- Onshore
- Offshore

Graph showing exploration drilling activity from 2000 to 2014.
EXPLORATION INVESTMENTS

195 M $ in 2014

Investment in Million $ US
EVOLUTION OF THE NATIONAL OIL PRODUCTION

Thousand BO

win-win partnership

www.etap.com.tn
NATIONAL GAS PRODUCTION & ETAP SHARE
(Million Cubic Meter)

Prod Nationale    Prod Concess ETAP
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How to Explore in Tunisia?

OPEN ACREAGE ASSESSMENT

Access to ETAP data base & facilities free of charge

- Geophysical Data (Seismic, Gravity, Airmag)
- Geological Data (Well Reports, Logs)
- Regional Synthesis and Open Block Studies
- Technical, Legal & Fiscal Presentations
- Workshops & Evaluation Joint Teams
- Field Trips
How to Explore in Tunisia?

LICENSING

CHOICE OF BLOCK

PROSPECTING AUTHORIZATION
(Geological Option)
- Geological Work
  1 Year

PROSPECTING PERMIT
(Seismic Option)
- Geological & New Geophysical Acquisition
- 2 Years with Possible Extension in Time
  (12 months maximum)

EXPLORATION PERMIT
- New Geological/Geophysical Acquisition & Drilling
- 5 Years Maximum - Renewal Rights with Possible Extension in Acreage and Time

DISCOVERY

PRODUCTION LICENCE
- 30 Years
# How to Explore in Tunisia?

## AGREEMENTS

<table>
<thead>
<tr>
<th>Joint Venture</th>
<th>Production Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Documents</strong></td>
<td>Convention with the Granting Authority</td>
</tr>
<tr>
<td></td>
<td>Joint Venture Agreement with ETAP</td>
</tr>
<tr>
<td><strong>Permit Holders</strong></td>
<td>ETAP and Partner as Co-Holders</td>
</tr>
<tr>
<td></td>
<td>Partner as Operator</td>
</tr>
<tr>
<td><strong>Exploration</strong></td>
<td>Partner as Operator</td>
</tr>
<tr>
<td>- Operating</td>
<td>Contractor</td>
</tr>
<tr>
<td>- Financing</td>
<td></td>
</tr>
<tr>
<td><strong>Development &amp; Production</strong></td>
<td>ETAP may elect to participate after Partner decision</td>
</tr>
<tr>
<td>- Participation</td>
<td>ETAP pays by cash call its share of development &amp; operating costs and reimburses its share of exploration expenses</td>
</tr>
<tr>
<td>- Financing</td>
<td></td>
</tr>
<tr>
<td><strong>Royalties &amp; Taxes</strong></td>
<td>Progressive rates according to profitability</td>
</tr>
<tr>
<td>- Royalty</td>
<td>As low as 2% paid by ETAP and Partner</td>
</tr>
<tr>
<td>- Tax</td>
<td>As low as 50% paid by ETAP and Partner</td>
</tr>
<tr>
<td></td>
<td>If ETAP elects to participate at a rate equal or more than 40%, the Income Tax will be due at a flat rate of 50%</td>
</tr>
<tr>
<td>- Uplift on exploration expenses (gas targets, deep targets, difficult areas)</td>
<td>10 to 30%</td>
</tr>
</tbody>
</table>

Agreements are approved by Decree
How to Explore in Tunisia?

Dead line for reception of open block offers from companies that had access the ETAP Data room (Each 3 Months): 31 January, 30 April, 31 July and 31 October.

Offers has to be received to the Direction Generale de l’Energie in a sealed envelop.

The evaluation of the offers and the awarding will be released within a period not exceeding three months.
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Tunisia Infrastructure

Before 1980

1980 - 2000

Now

Existing Infrastructure

New Infrastructure

Infrastructure in Progress

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Conclusion

ETAP acts as the owner for the Tunisian state

ETAP is playing an important role as NOC, promoting the E&P activities and investments in Tunisia, in line with our responsibility to ensure the sustained growth of the development of country’s petroleum industry.

ETAP also strives to optimize E&P assets:
- By increasing exploration drilling onshore and offshore Tunisia
- Exploring and developing tight reservoirs (Southern Tunisia),
- the deep offshore (Northern offshore) with the operators and partners.
UPCOMING EVENT

THE 13TH TUNISIAN PETROLEUM EXPLORATION & PRODUCTION CONFERENCE

October 26-31, 2015

FIRST ANNOUNCEMENT & CALL FOR PAPER

TECHNICAL SESSIONS

T1- Emerging Frontiers:
Exploration challenges and prospectivity in Tunisia
T2- Tectonic and structural geology
T3- Organic geochemistry, basin modelling and petroleum systems
T4- Reservoirs Sedimentology
T5- Reservoirs engineering, modelling and management
T6- Reservoir Geophysics
T7- Geophysics: New technologies and Application
T8- Drilling, completion technologies and operation management
T9- Field development and Enhanced recovery
T10- Oil & Gas projects management
T11- Unconventional Resources
T12- Conventional & Unconventional: Legal and fiscal terms
T13- Non-Hydrocarbon Gases: Management and Solutions
T14- GIS & Data management
T15- HSSE
T16- Environment and development challenges

Taking up Challenges for a new Era of Success…

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DON'T MISS THE EPC 2015
&
SEE YOU in TUNISIA in October

Welcome to ETAP BOOTH – 732
And thank you for your attention

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