Oil and Gas Exploration and Production Perspectives in Greece

THE ROLE OF THE HELLENIC HYDROCARBONS RESOURCES MANAGEMENT COMPANY

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President and CEO of HHRM

www.greekhydrocarbons.gr
Milestones of the Hellenic Hydrocarbons Resources Management (HHRM)

Legal and structural steps of construction

2011 Establishment of HHRM national company
2015 Declaration Act
2016 Staffing of HHRM since November 2016

2011-2016 The technical and organizational tasks were managed by the
Directorate of Hydrocarbons of the Ministry of Environment and Energy

Acquisition of 2D seismic data (non exclusive) by the Norwegian company PGS (2012-2013)
Open Door Lease Agreements follow up (2014)
Onshore bidding round in Western Greece for 3 blocks (January 2015)
Offshore bidding round for 20 blocks in the Ionian Sea and South of Crete Sea (July 2015)
Lease Agreements negotiations (2016)
<table>
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<th>Priorities of HHRM in December 2016</th>
<th>4 months later – March 2017</th>
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<td><strong>Staffing of HHRM</strong></td>
<td>Technical and legal team of 9 people</td>
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<td>Technical and commercial negotiations</td>
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<td>Evaluation of the subsurface potential</td>
<td>Ongoing studies in the Ionian Sea</td>
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<td>Cooperation with universities, research institutes and other energy organizations</td>
<td>Polytechnic School of Crete, University of Patras, IGME, DEPA, CCIA, HEEA EBRD, BEICIP, PGS, HALLIBURTON, IHS</td>
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Objectives

Contribution to the economic growth and energy independence

Development of the geological knowledge of the country

Support and promotion of research for the O&G industry

Creation of jobs in innovative fields

Signing of agreements and ways to strengthen international relations
The position of Greece in the Eastern Mediterranean

Western part of the Eastern Mediterranean - Eastern part of the Western Mediterranean
Major sedimentary basins
Current situation of acreage
Published estimated reserves for a few blocks

Out of these 11 blocks, 5 of them bear at least 500 MMBO of estimated reserves in western Greece onshore and offshore.
Current situation of acreage

**IOANNINA**
Seismic acquisition in a mountainous rough terrain requires important investments

**PATRAIKOS**
First phase finalized with 3D seismic (double azimuth) and top of the rank environmental study by the University of Patras

**KATAKOLON**
Exploitation rights were awarded in October 2016. Field Development Plan discussions. The field was discovered in the early 80s

**ARTA-PREVEZA**

**AITOLOAKARNANIA**
The three onshore lease agreements were approved by the Court of Auditors

**NW PELOPONNESE**

**BLOCK 2**
Lease agreement initialed with TOTAL-HELPE-EDISON

**BLOCK 10**
Ongoing

**PRINOS**
Prinos production raised to 5000 bod (3600 bod average for 2016)

**THRACE SEA**
Ongoing

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New areas of interest in the Ionian Sea

Carbonate platform and reefs

Several tenths of million years ago

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New areas of interest in the Ionian Sea
New areas of interest in the Ionian Sea

- Carbonate platform and reefs
- Structurally complex area
- Thrusts
Open areas of interest in the Ionian Sea
New areas of interest south of Peloponnese and Crete

Thrusts

Transpression / Transtension

Wedge

Structurally complex area

Carbonate platform and reefs
Seismic and well databases
Infill or 3D seismic lines
26,000 sq.km.

Infill seismic lines
11,000 sq.km.

Change of direction to N-S, E-W
46,000 sq.km.

New seismic projects

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Where to explore next
Thank you

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