

Conventional and Unconventional Resources in Mexico



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Agenda

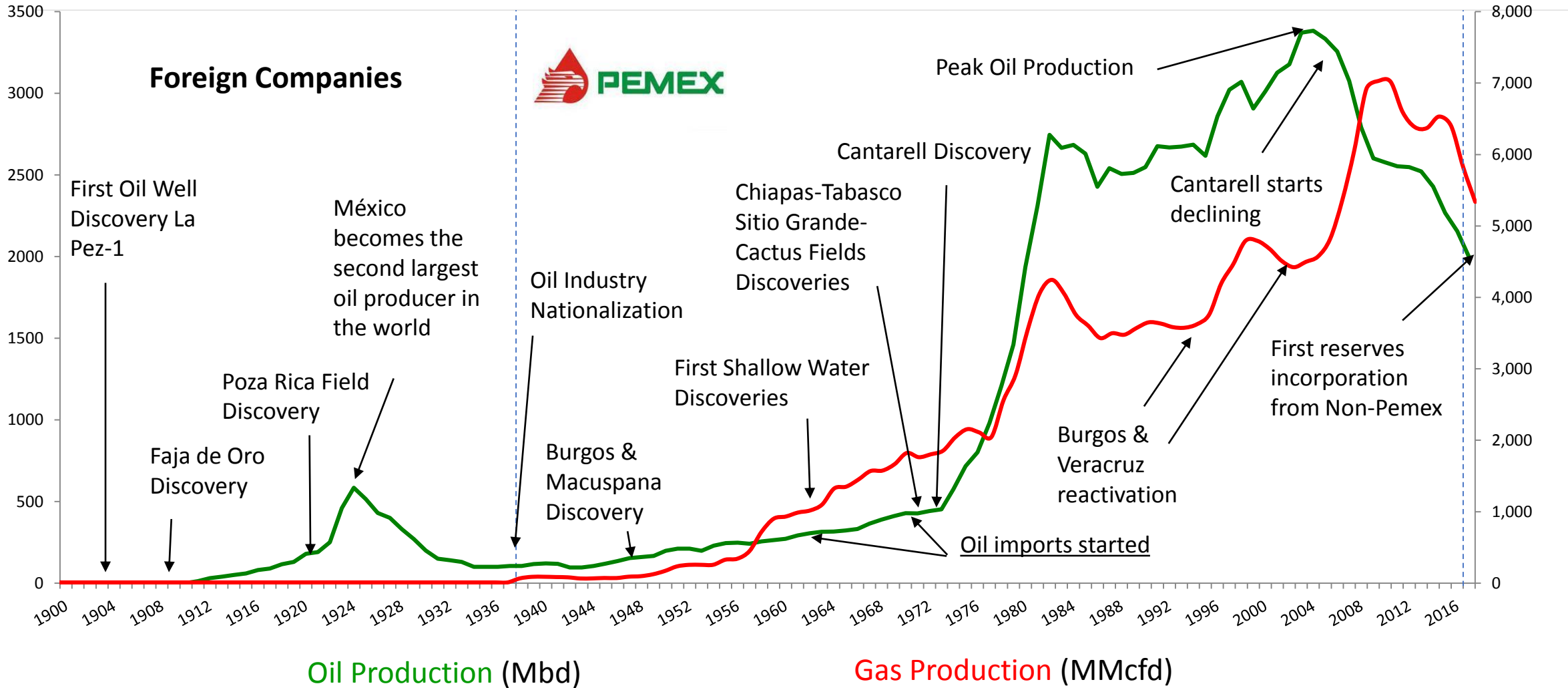
- **Hydrocarbons potential in Mexico**
- **Mexico Strategy. Five Year Plan**
- **Surface and social assessment for contractual areas design**

Hydrocarbons potential in Mexico

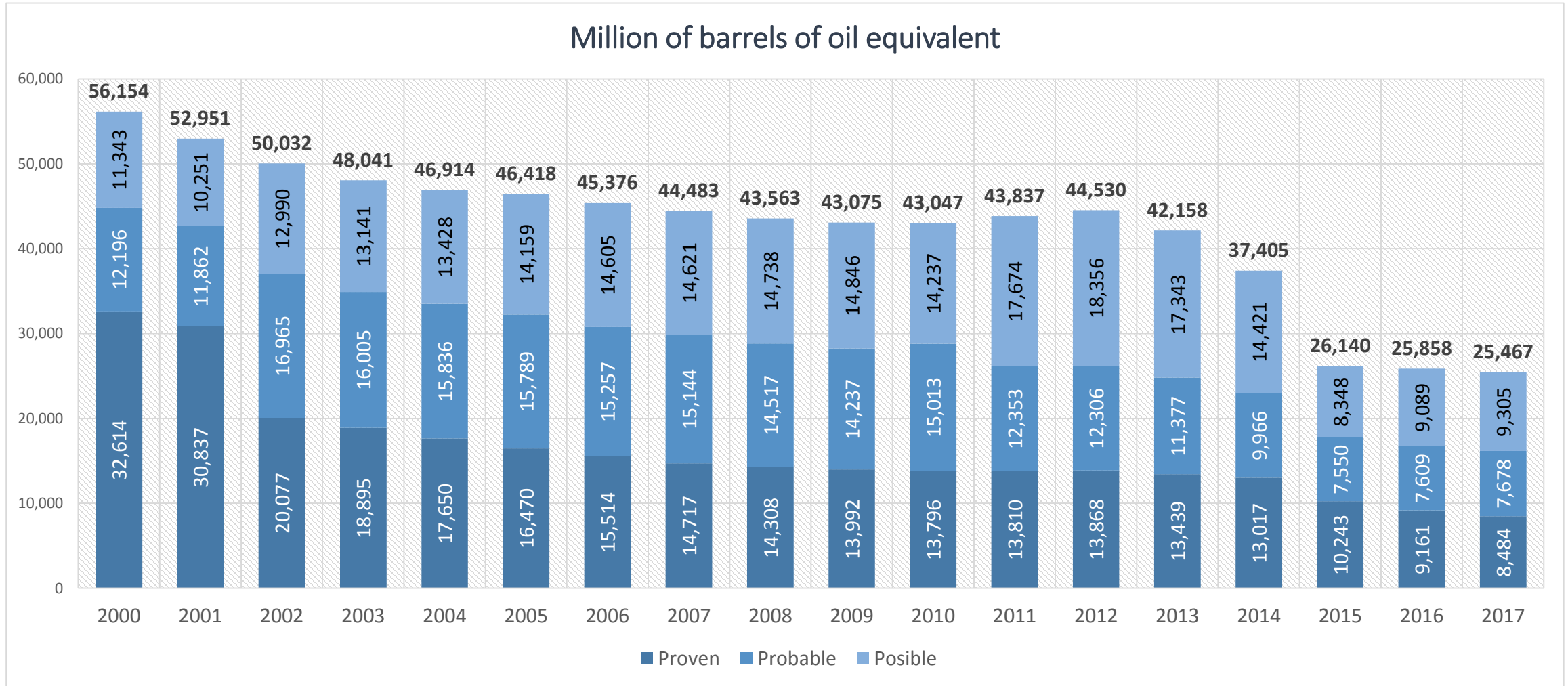
Resources & Reserves



Production History



Mexico reserves evolution



Mexico Reserves and Resources representation

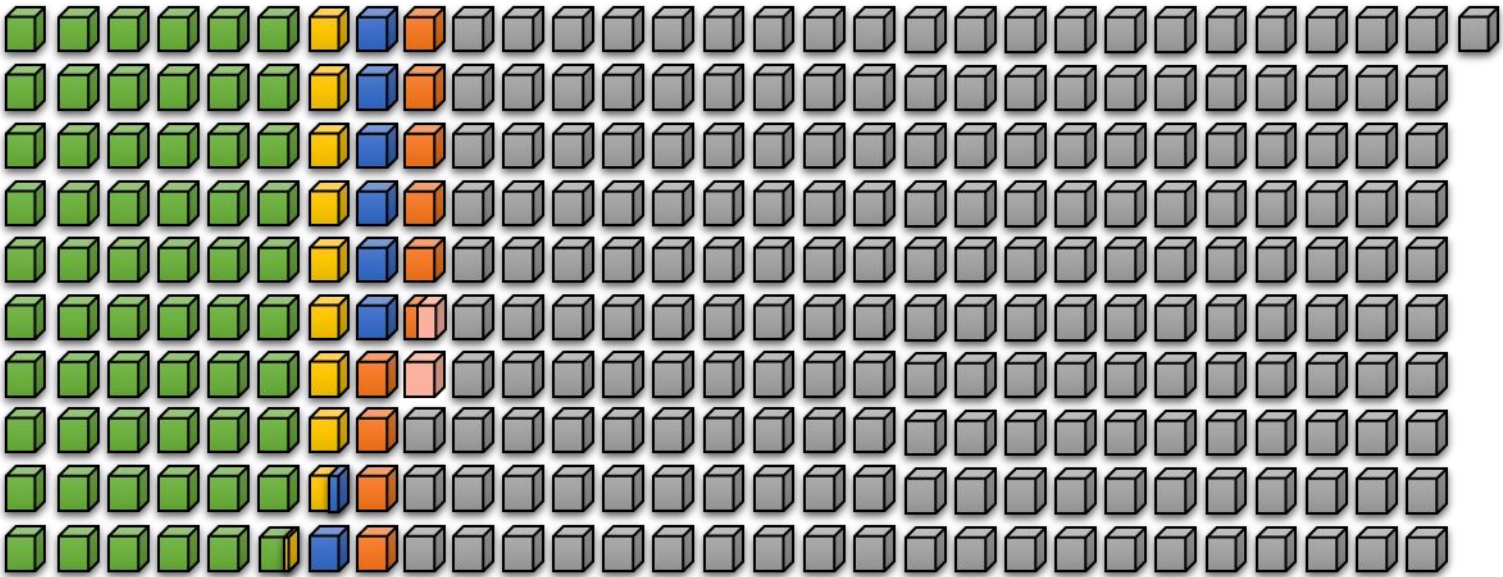
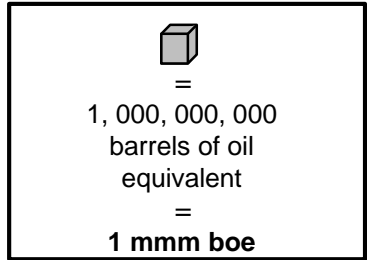
(1 January 2018). Volume in mmmboe

*Original volumen in place = 291

 Cumulative Production = 59.9

 +  +  3P Reserves = 8.4 + 7.6 + 9.3 = 25.4

 Contingent Resources = 1.8



 Remaining Volume = 203.9

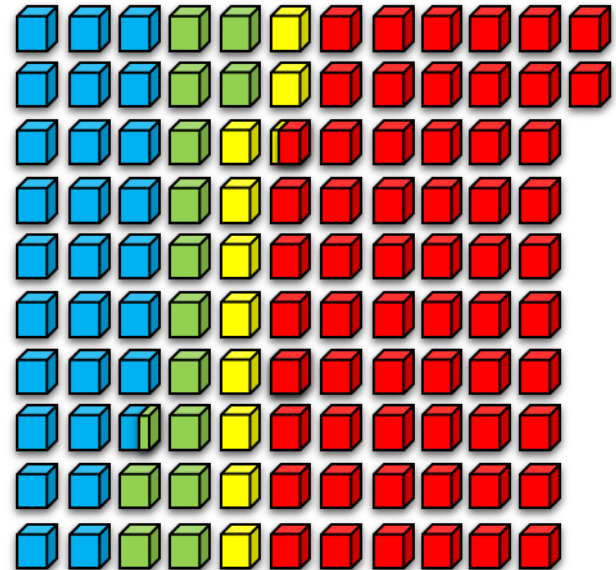
Prospective Resources = 112.8

 Deep Water = 27.7

 Shallow Water = 14.6

 Land Conventional = 10.2

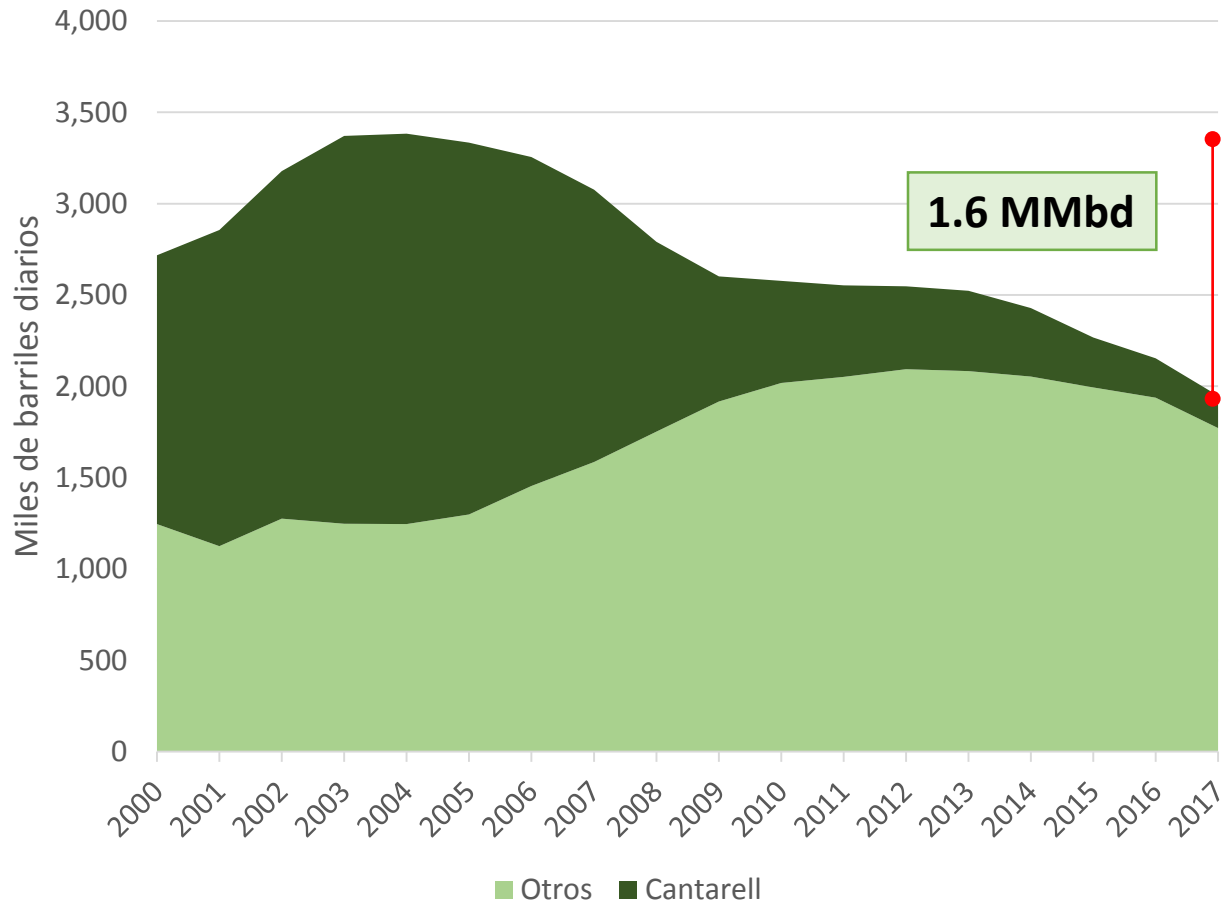
 Land Unconventional = 60.2



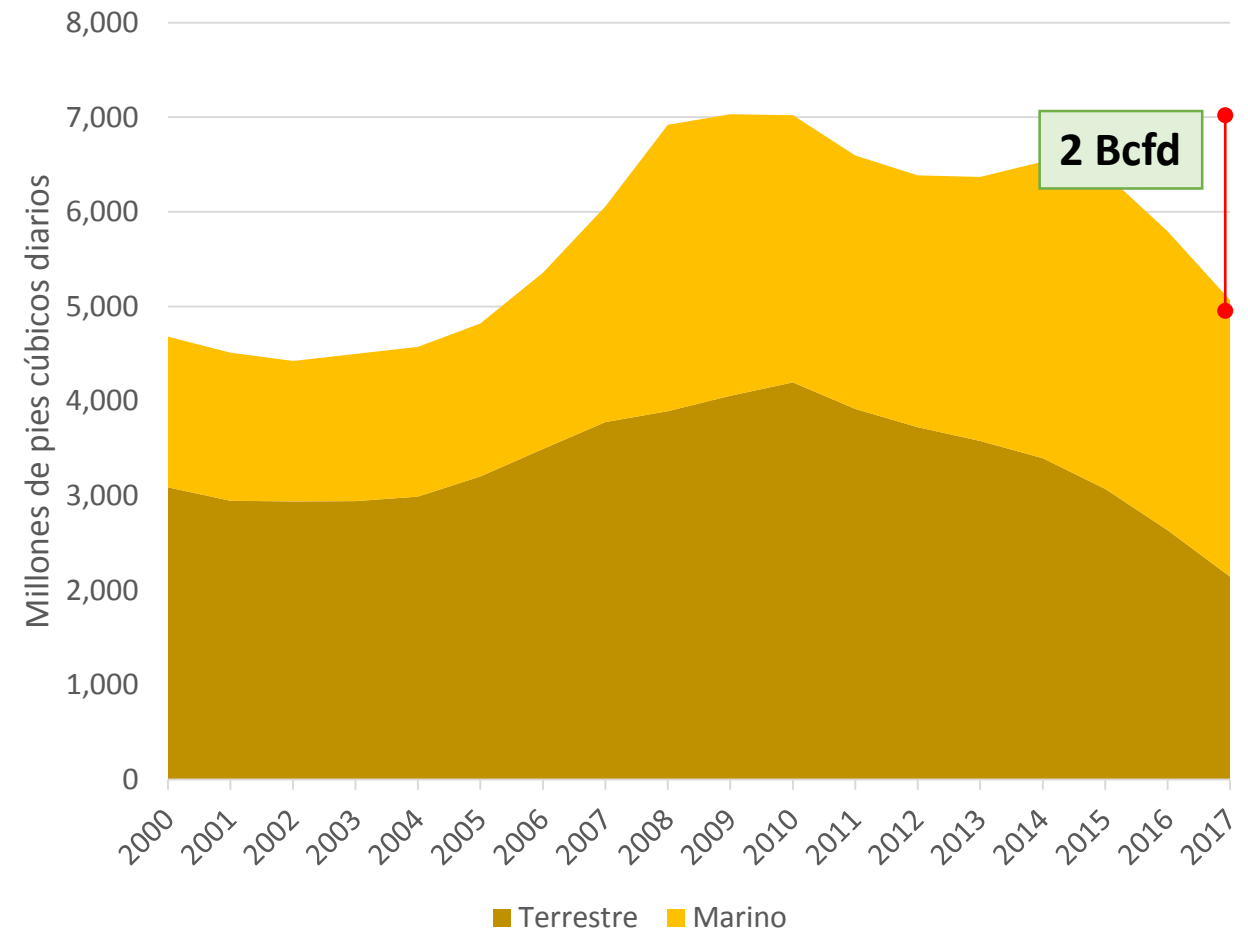
*Original Volume 3P

National Production

Oil Production (mbd)



Natural Gas Production (mmcfd)



Five Year Plan

A successful opening



Oil Rounds

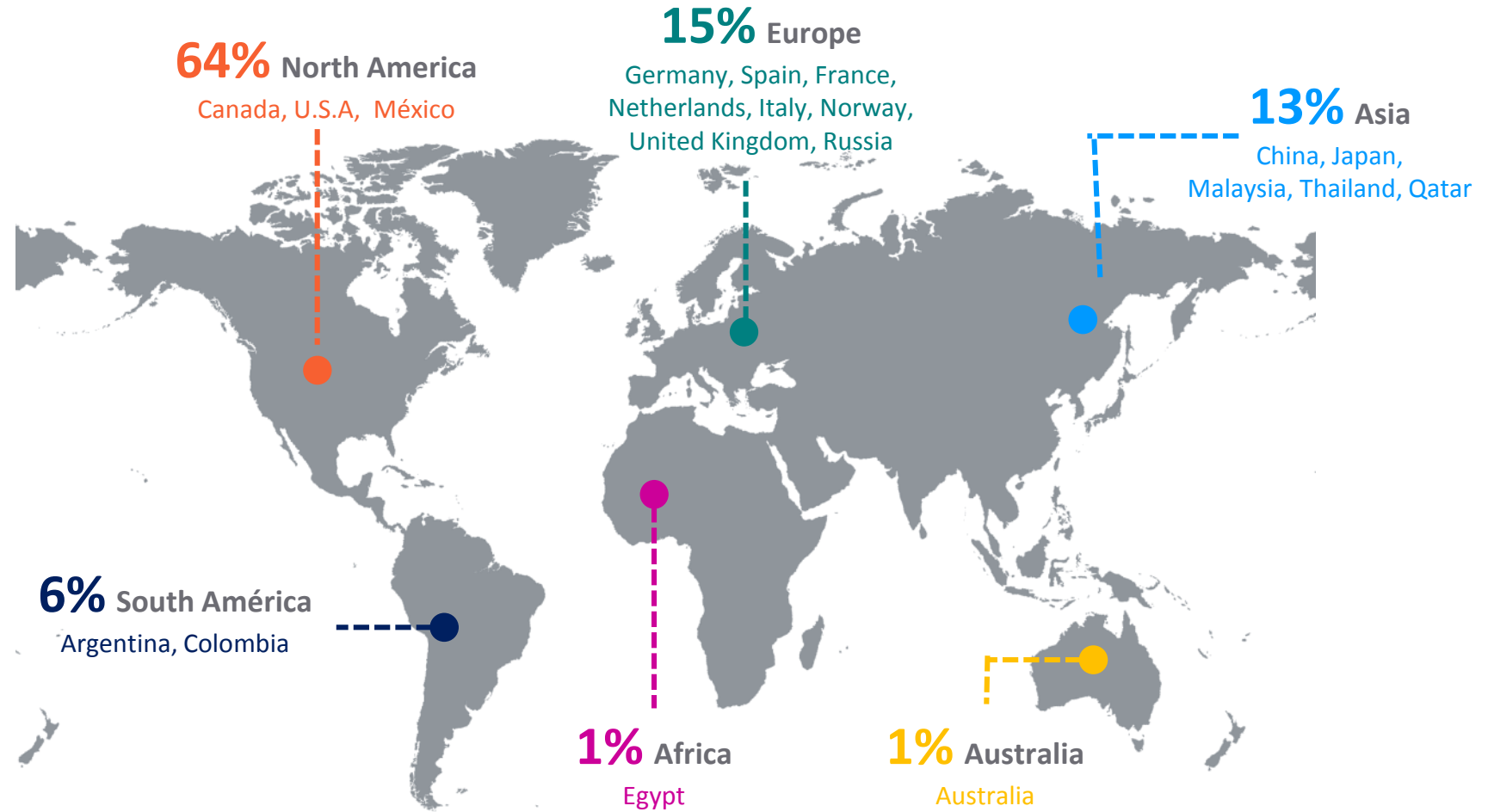
9 Biddings rounds
3 FarmOuts

107 New Contracts

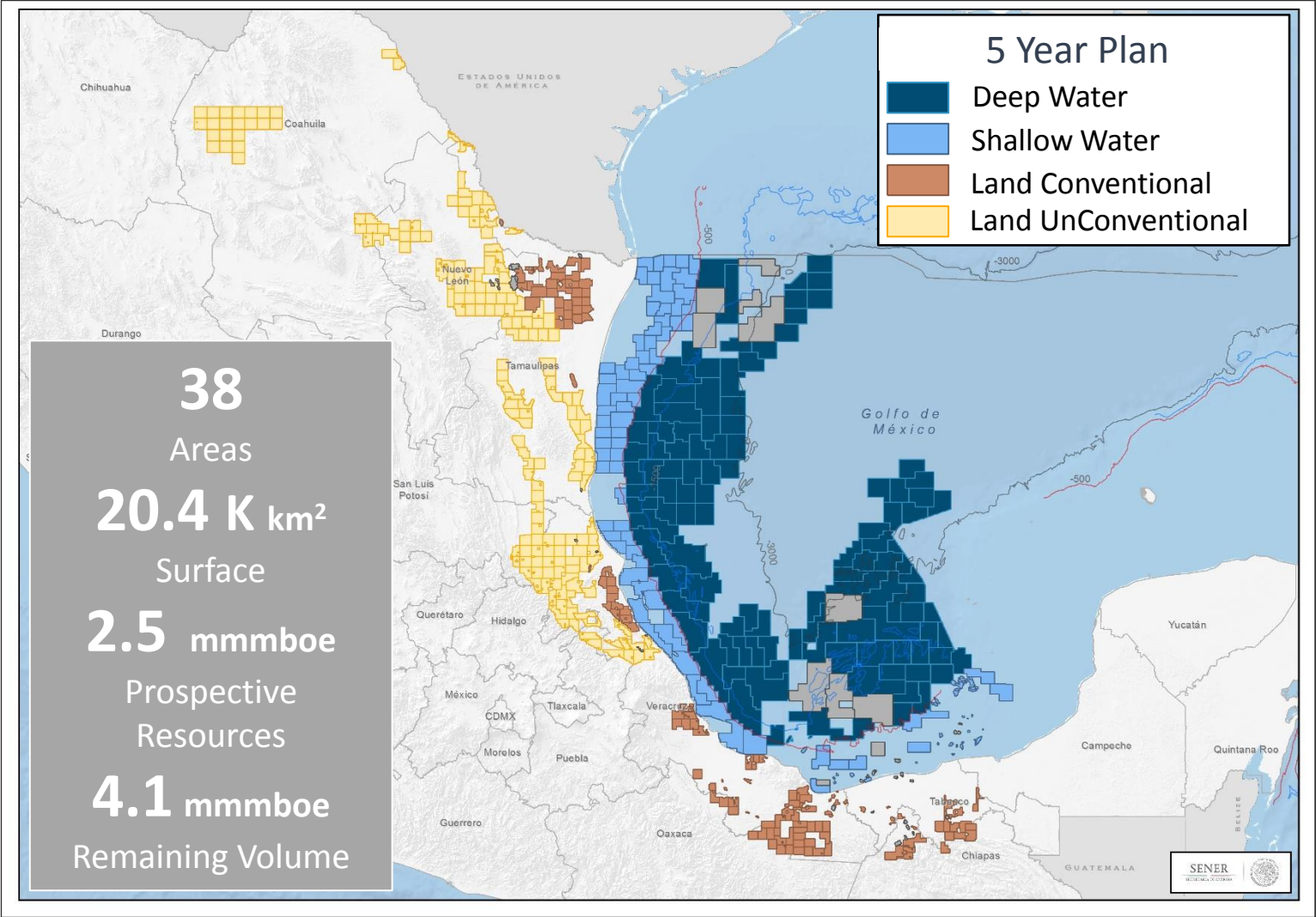
67% Award success rate

\$161 USD Billion Investment

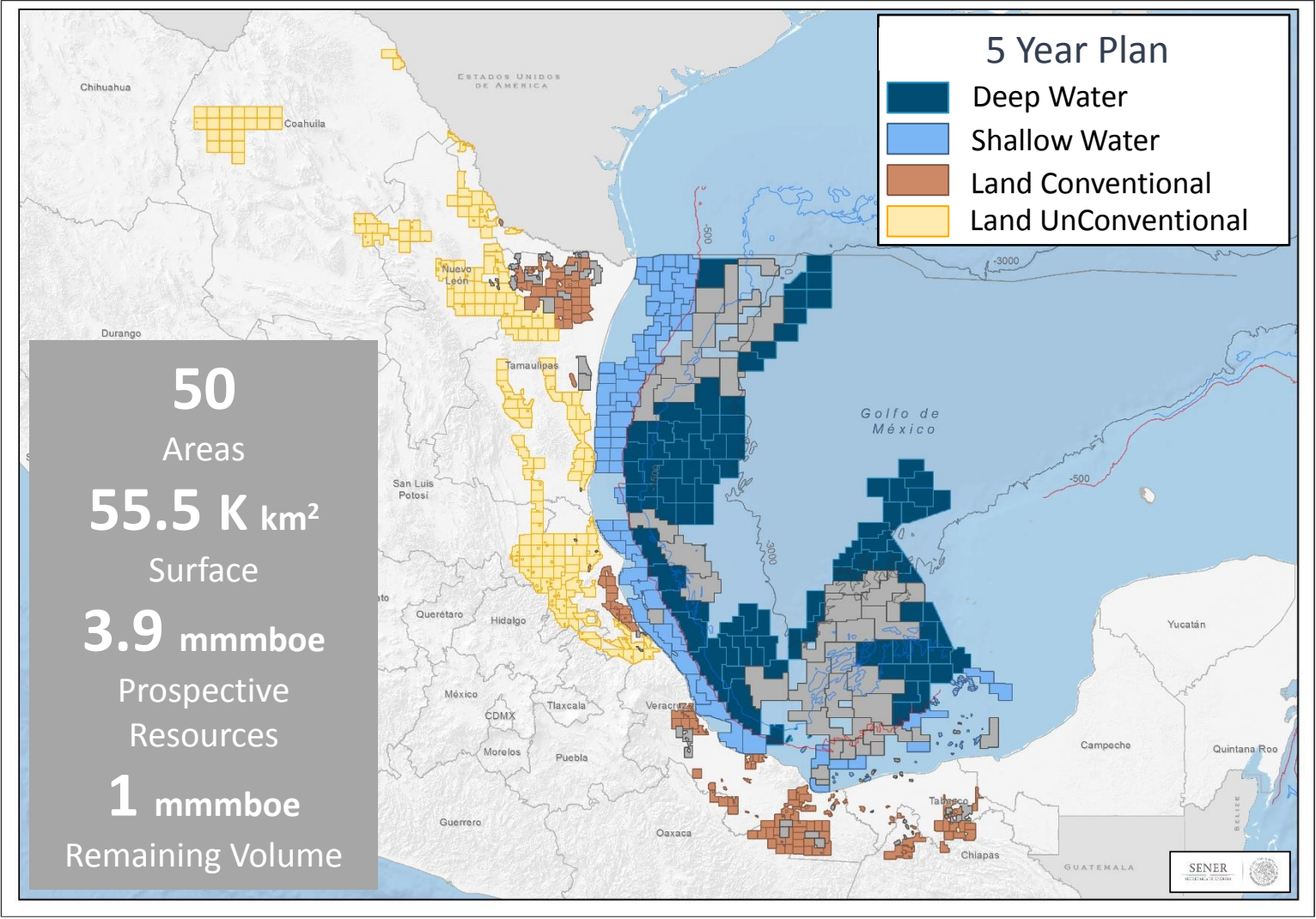
73 Private companies



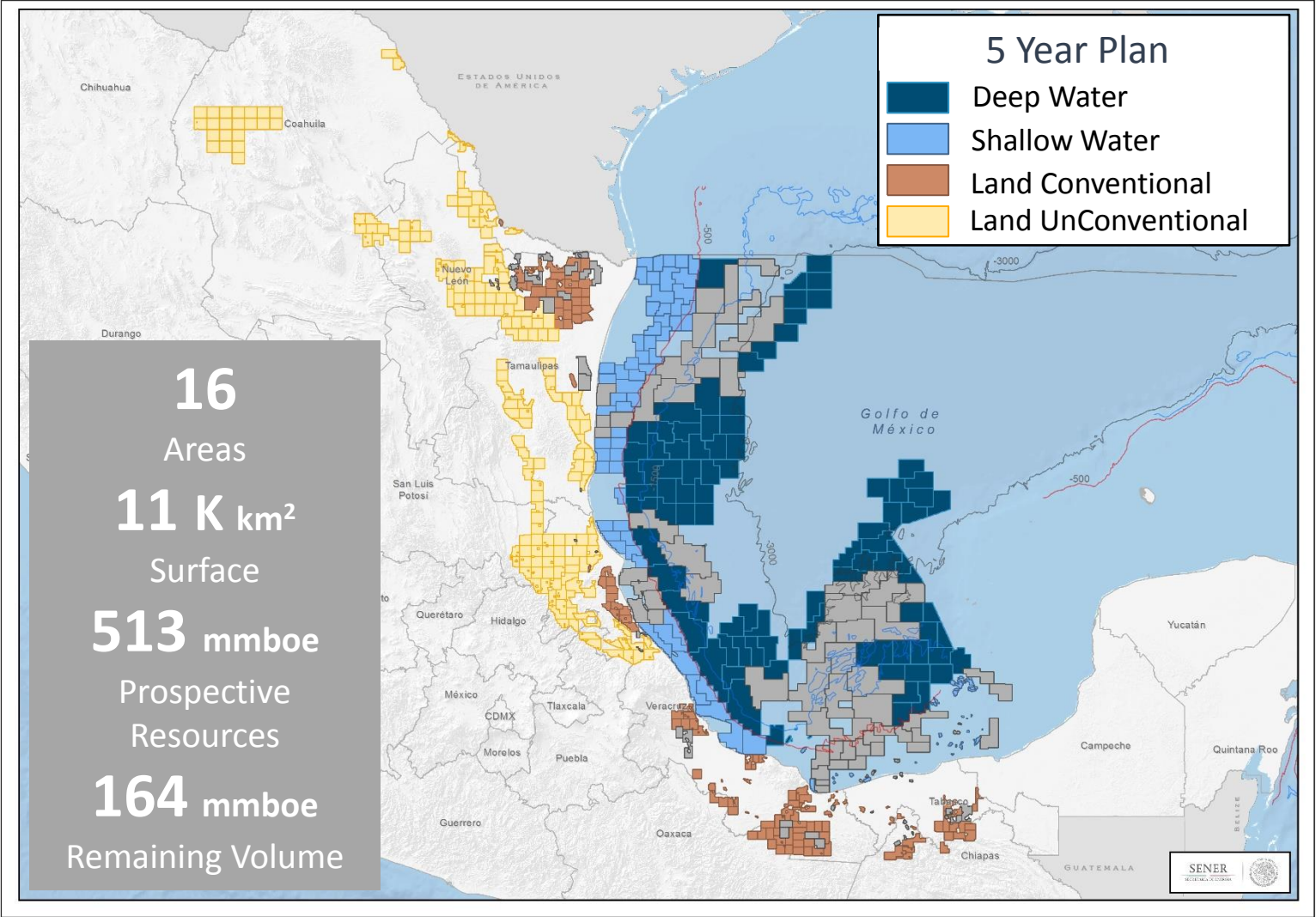
38 contractual areas awarded in Round 1



50 contractual areas awarded in Round 2

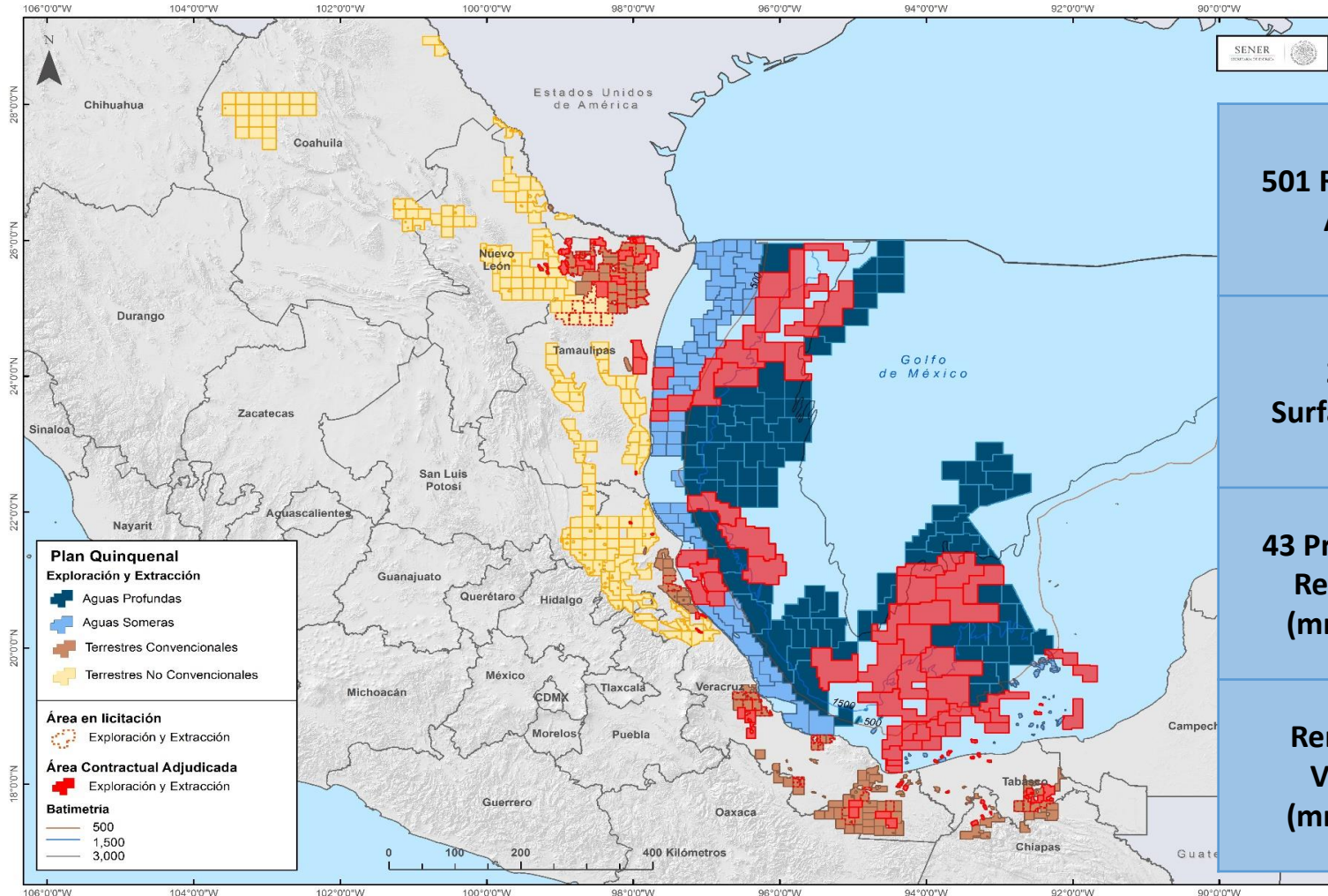


16 contractual areas awarded in Round 3



Still remaining 5 times the number of contractual areas awarded

- ✓ 107 areas awarded
- ✓ 67% Success rate
- ✓ 161,000 million USD Estimated Investment
- ✓ 75% Government Take
- ✓ 900 thousand employments



501 Remaining Areas	318 conventional
	183 unconventional
260 k Surface (km²)	207 k conventional
	53 k unconventional
43 Prospective Resources (mmmboe)	12 conventional
	31 unconventional
Remaining Volume (mmmboe)	38 conventional
	0 unconventional

Surface & social assessment

Design for tender areas



Key elements for contractual areas design

1. Regulatory aspects

- ✓ Pemex's Entitlements
- ✓ Safeguard Areas
- ✓ Contracts
- ✓ Areas in bidding process
- ✓ Protect Natural Areas
- ✓ Indigenous communities

2. Technical aspects

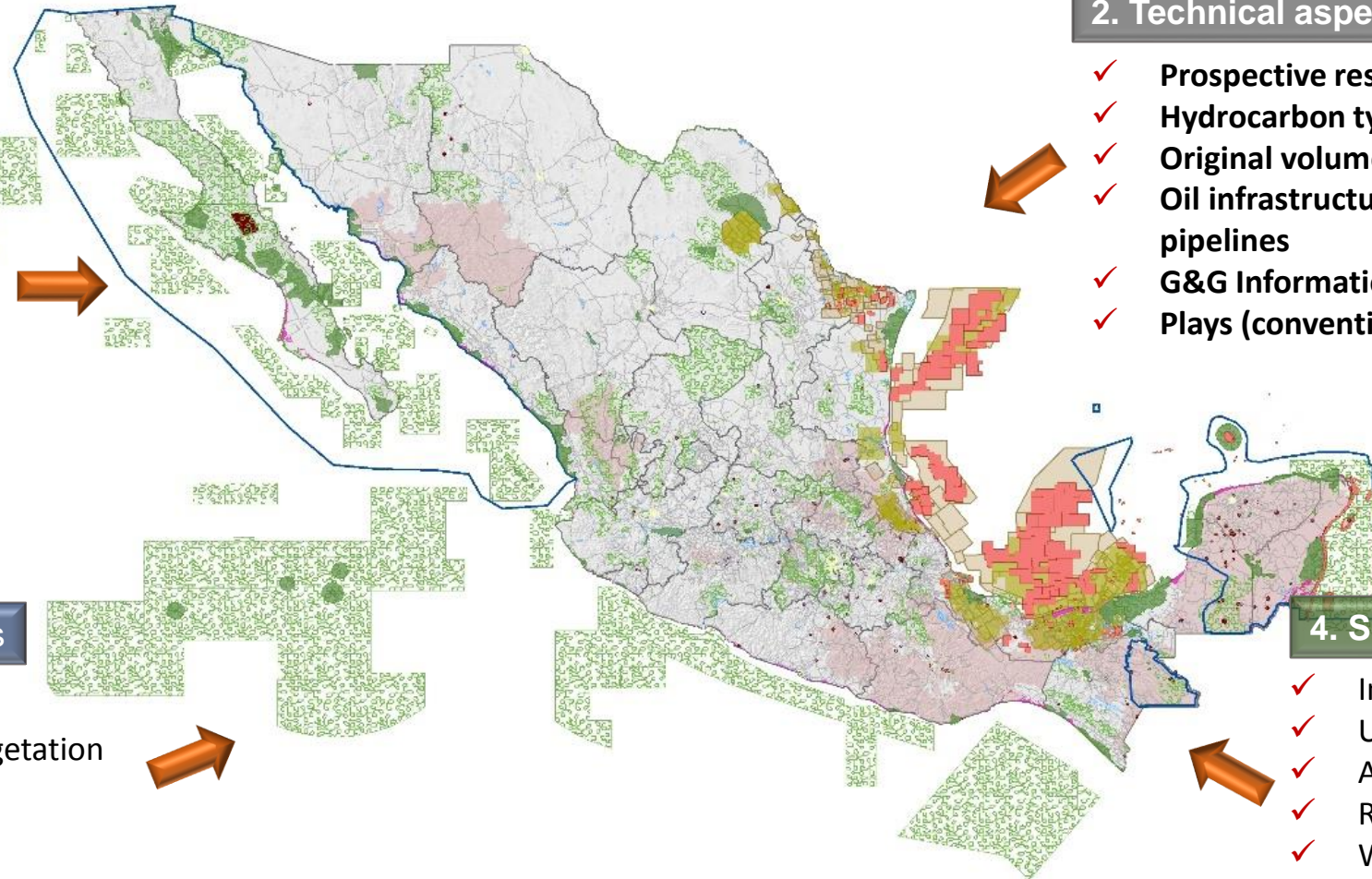
- ✓ Prospective resources
- ✓ Hydrocarbon type (Oil / Gas)
- ✓ Original volume remaining
- ✓ Oil infrastructure: Wells, facilities and pipelines
- ✓ G&G Information
- ✓ Plays (conventional and unconventional)

3. Physical aspects

- ✓ Aquifers
- ✓ Use land and vegetation
- ✓ Terrain relief
- ✓ Water deposits

4. Social Aspect

- ✓ Indigenous regions / population
- ✓ Urban areas
- ✓ Archaeological and historical sites
- ✓ Rural Sites
- ✓ Water availability
- ✓ Infrastructure and urban equipment (roads, hospitals, schools, etc.)



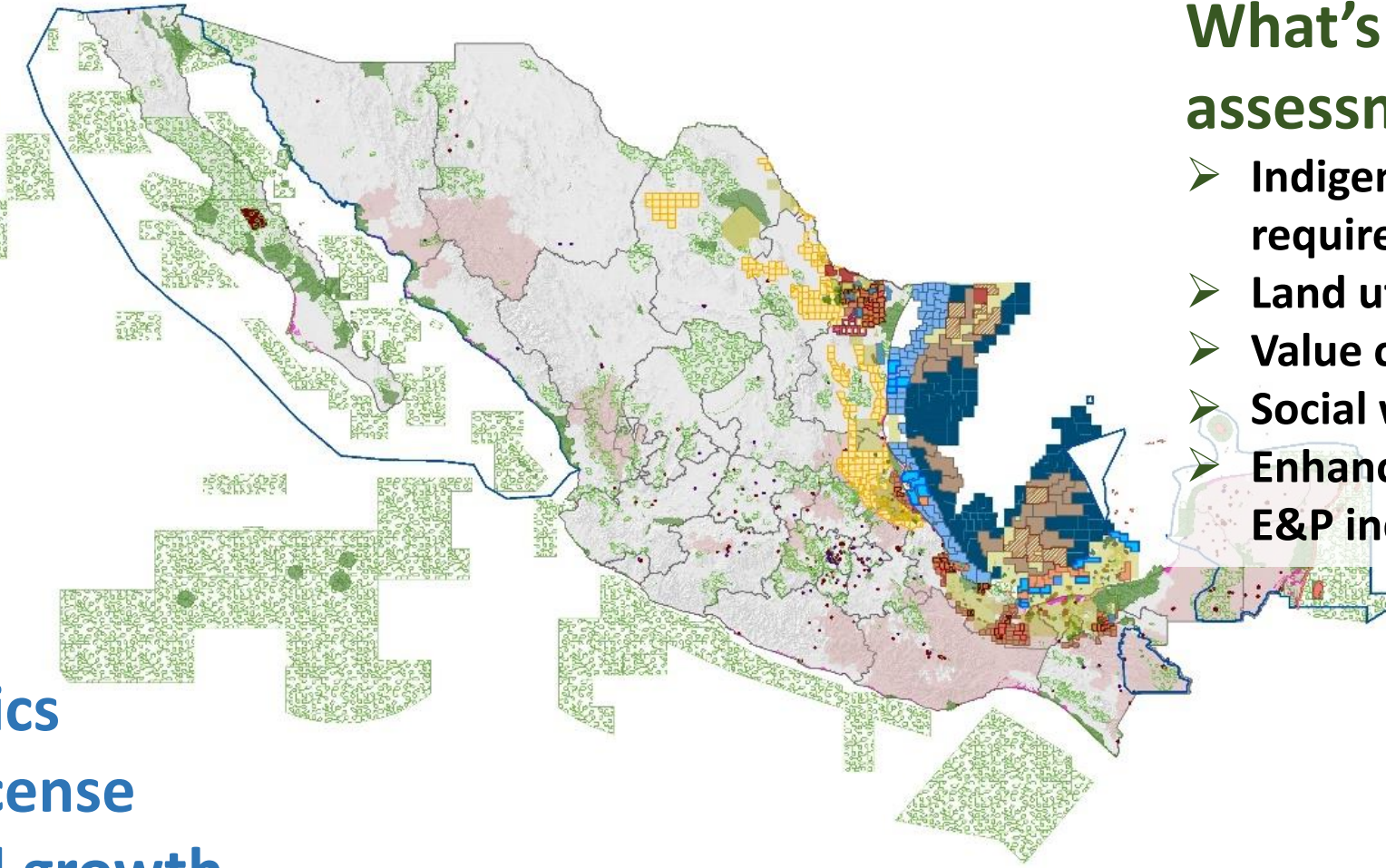
Responsible and sustainable tenders for E&P

Surface & subsurface analysis



Aiming for:

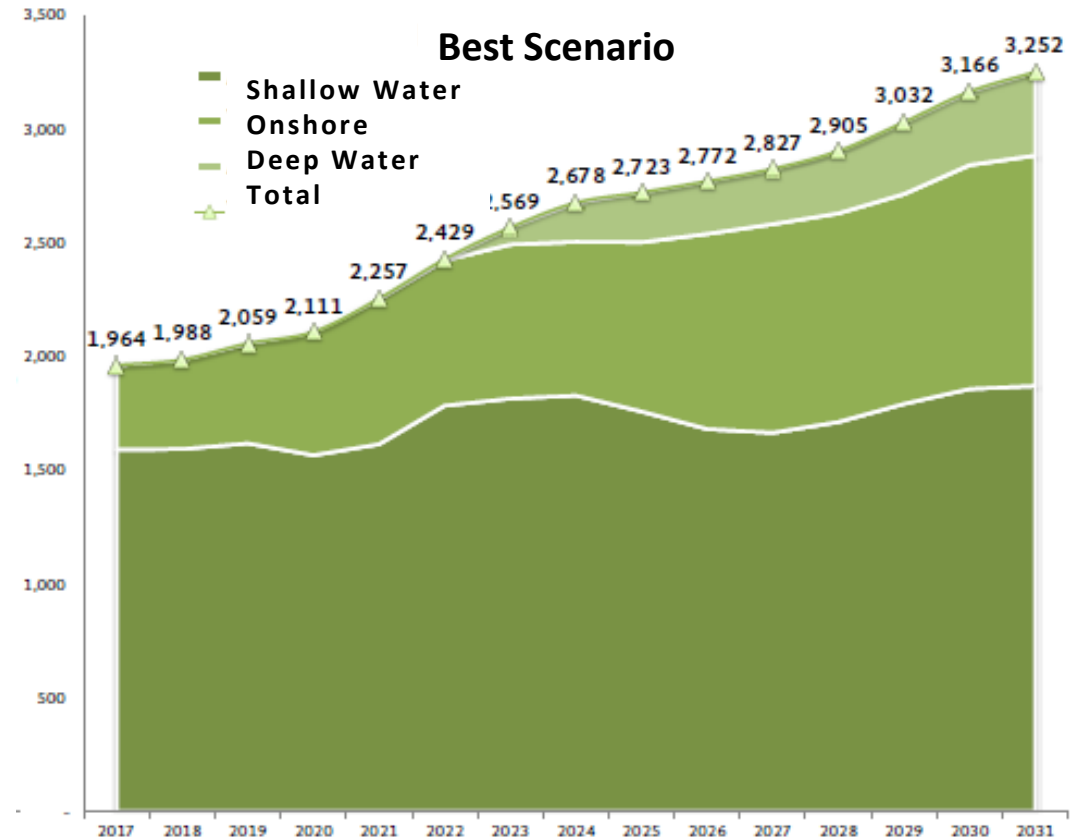
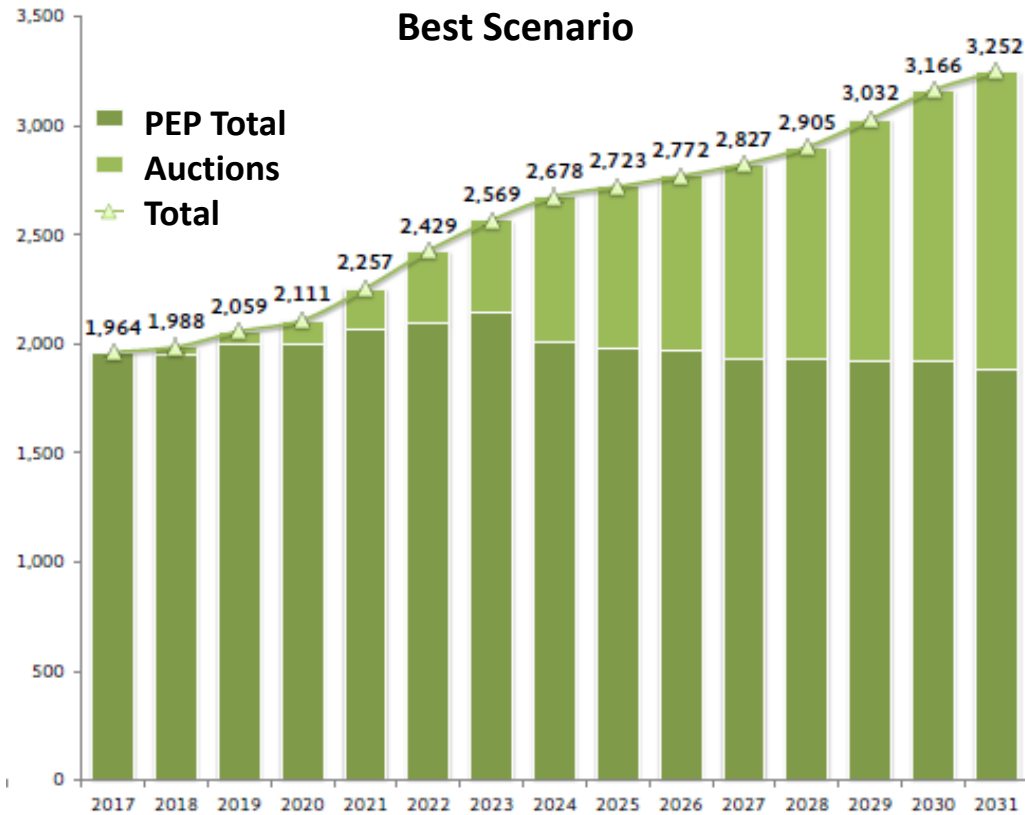
- **Economics**
- **Social license**
- **Regional growth**



What's next on social assessments assimilation?

- Indigenous consultation requirements
- Land utilization optimization
- Value chain integration
- Social welfare measurement
- Enhance public acceptance of E&P industry

Expected crude oil production 2017-2031

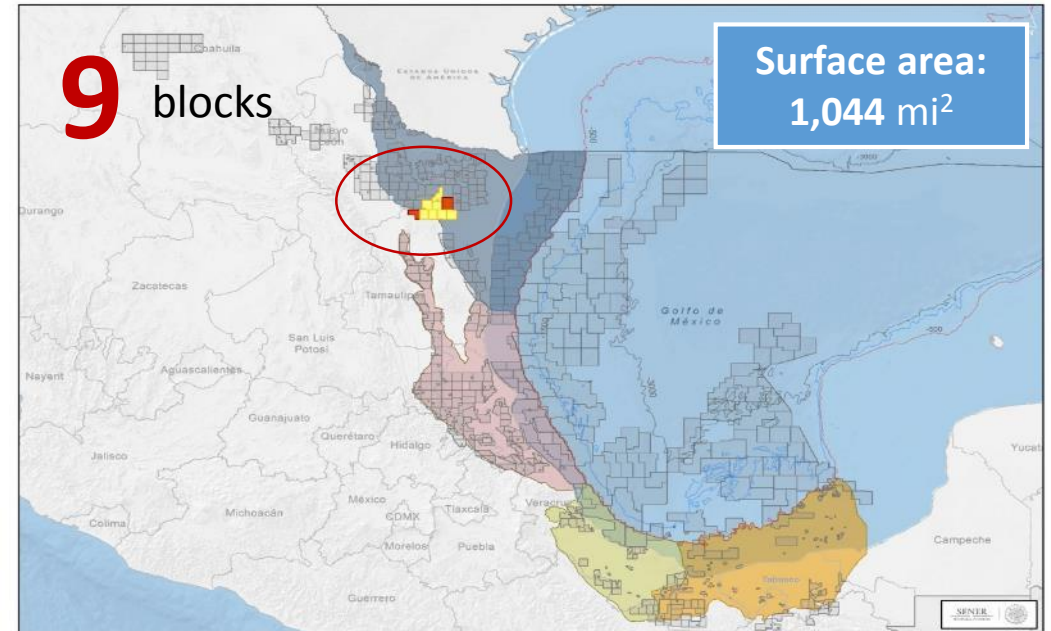
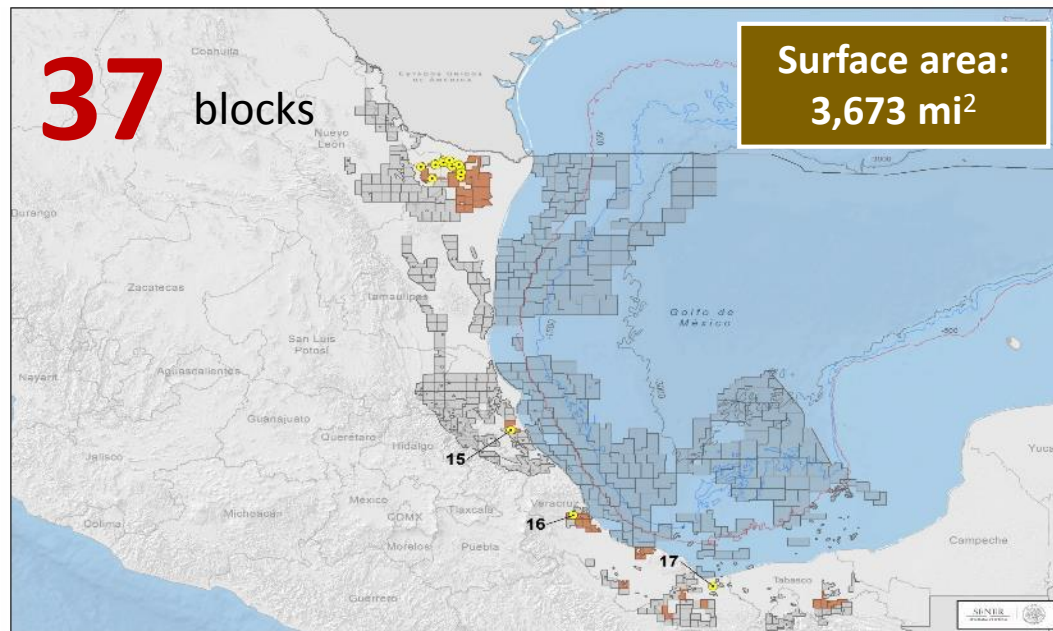


Source. SENER Prospectiva de Petróleo Crudo y Petrolíferos 2017-2031

Mexico's upstream opening continues with two upcoming onshore rounds that offer 46 blocks, combined

Onshore Conventional | Round 3.2 | Sep 27th

Onshore Unconventional | Round 3.3 | Sep 27th



Investment per block: **89** Million US\$

Investment per block: **260** Million US\$

2 bidding rounds: **1,474** Million boe of prospective resources

1.5 times the auctioned surface area of previous onshore rounds

Final comments

- 1. It is necessary to maintain the rate of activity to attract the required investment** to transform prospective resources into reserves in the short-term.
- 2. Social license has to be maintained on top of the attention priorities to ensure sustainable E&P** activities but as well to ensure the correct evaluation and valuation of oil and gas projects.

THANK YOU!

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