



**MINISTRY OF ECONOMY AND SUSTAINABLE
DEVELOPMENT**

STATE AGENCY OF OIL AND GAS

IENE

**SE Europe Hydrocarbons Upstream Workshop
ATHENS
2018**



GEORGIA

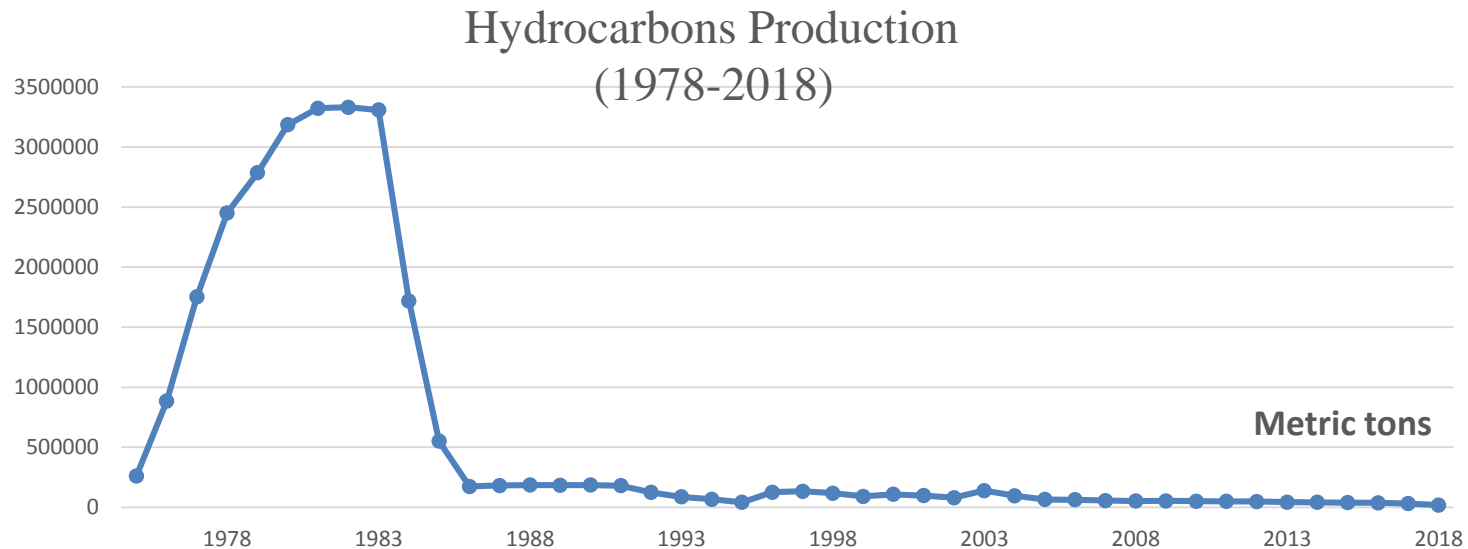
saqarTvelo



Area - 67,900 km² , population - 3,713,804 , 9th in terms of ease of doing business, 16th in terms of economic freedom



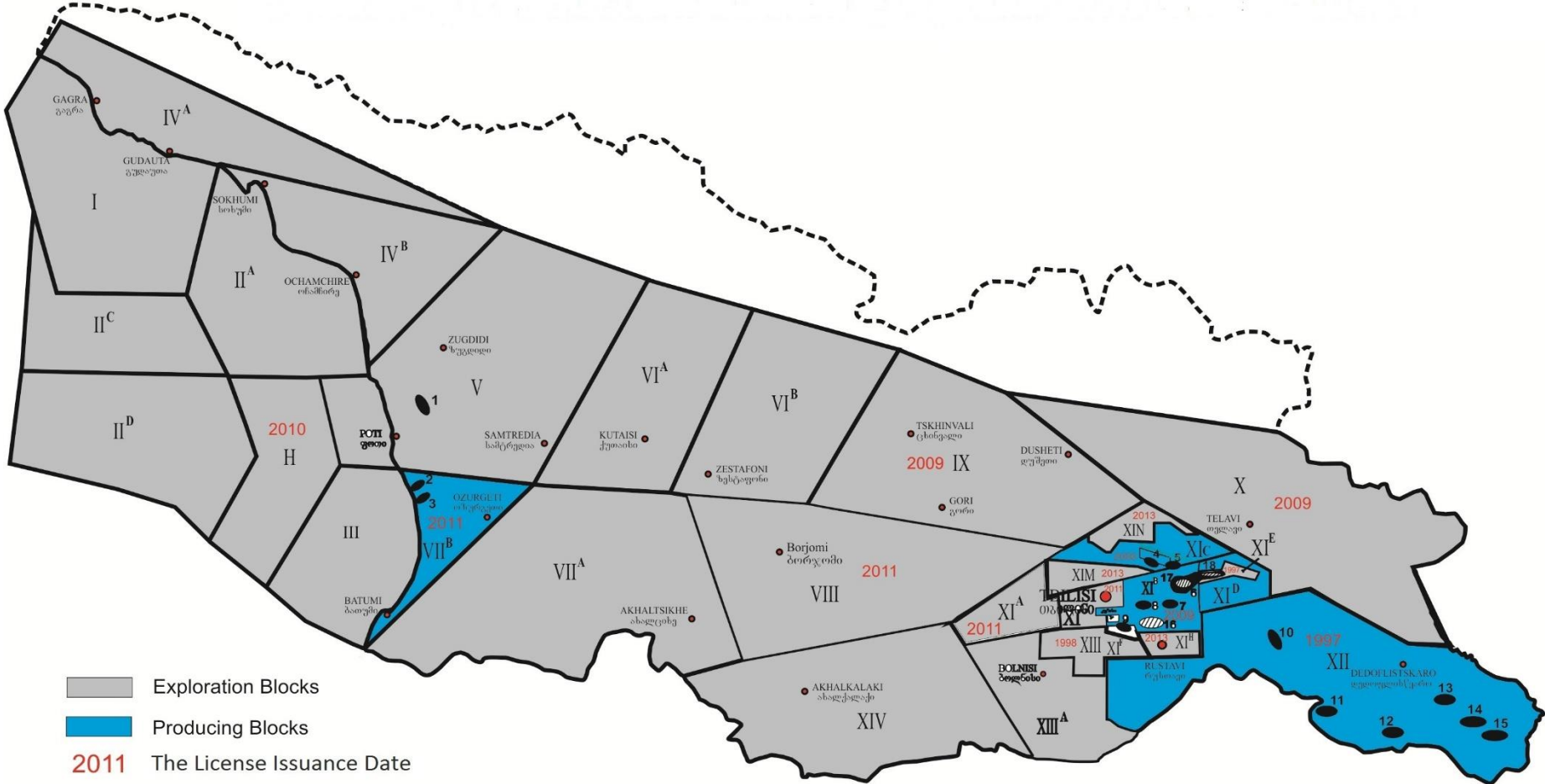
Abstract of Upstream Sector



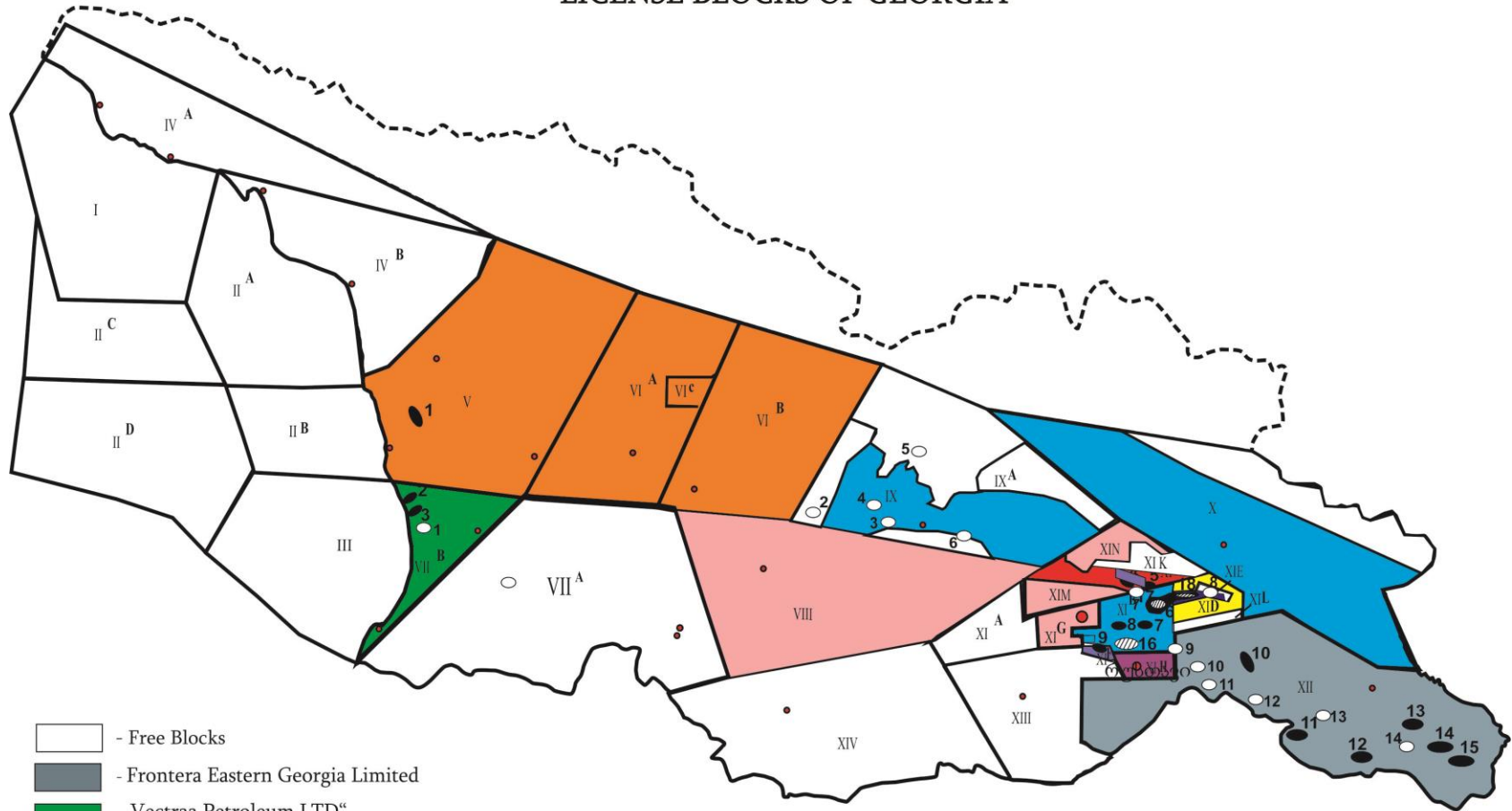
- The First Large-scale Discovery of Oil and Gas in Georgia Dates Back to Late 1970s
- 28 mln. Tons of Oil Produced in Total in Georgia
- Works Conducted Mainly Focused on Development of the Above Discovery
- First License Issued in 1996
- Works Focused on New Discoveries Began from 2010-2012
- 23 Production Sharing Contracts are Signed

Oil and Gas License Blocks of Georgia

23 Production Shearing Contracts, 31 blocks



LICENSE BLOCKS OF GEORGIA



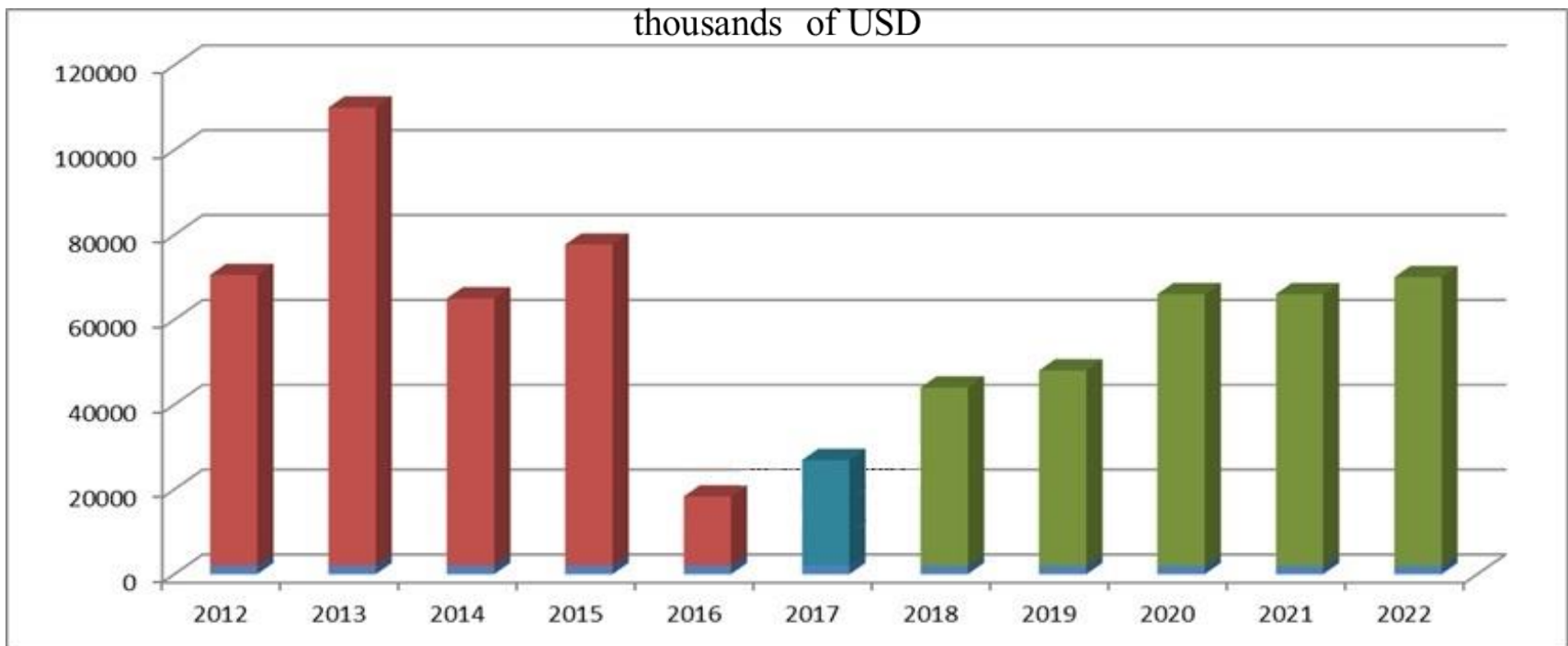
- Free Blocks
- Frontera Eastern Georgia Limited
- Vectraa Petroleum LTD
- Georgia Oil & Gas Limited
- LLC Georgia Coalition Energy Limited Company
- West Gulf Petroleum Engineering Company LTD
- Schlumberger Rustaveli Company Limited

- Georgia Oil & Gas Limited, Block Energy
- Nazvrevi Oil Company Limited
- Martkopi Oil Company Limited
- „Ninotsminda Oil Company Limited
- Elenilto Georgia

CURRENT AND PLANNED PROJECTS 2018-2022

For 2018-2022 it is planned: to drill 19 deep wells, 2D seismic survey 712 km , 3D seismic survey - 378km²

Cost of works
2012-2022



Management Structure for Upstream Sector

- Ministry of Economy and Sustainable Development of Georgia – develops basic state policy and principles
- State Agency of Oil and Gas _ ensures proper management of upstream sector in accordance with the basic state policy
 - Implements State regulation of oil and gas operations
 - Represents the State in contracts
- National Oil Company
 - Acts as the commercial partner
 - Manages state owned share of oil and gas

Legal Regulatory Basis for Upstream Sector

National law on Oil and Gas

- Determines unified state policy in oil and gas sector
- Promotes and supports investments
- Protects the legitimate interests of entities participating in oil and gas operations
- Identifies basic principles of oil and gas contracts

National Regulatory Rules for Oil and Gas operations

- Technical and procedural documents managing activities and relationships regarding oil and gas operations

Contract and License

- Describe detail conditions for oil and gas production and ownership, rights and obligations of investors and the state, ways and means of dispute resolution

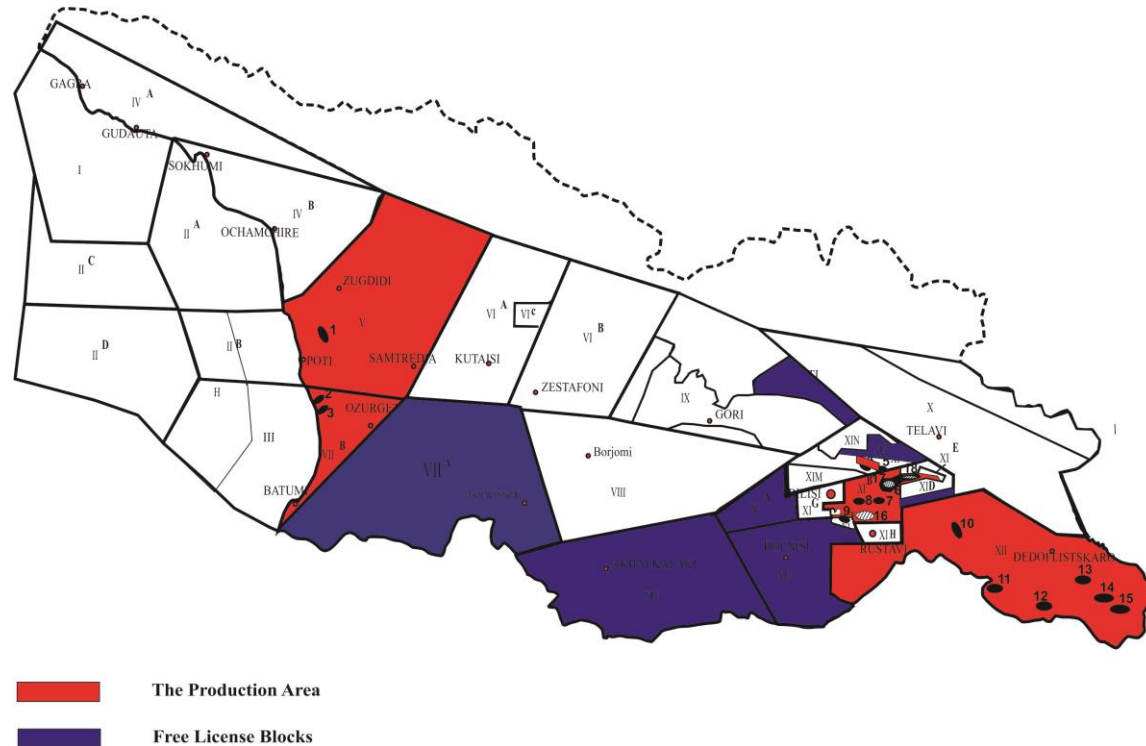
Tax benefits and stabilization

- According the Georgian tax code, oil and gas operations are free from the VAT payment (18%), from import tax (12%), excise tax.
- National Oil Company commits to pay the profit tax (15 %) instead of the investor
- National Oil Company commits to pay the fee on using natural resources (oil -10\$ per/tonne, gas-1\$ per/1000 cubic meter) instead of the investor
- According the Law on Oil and Gas each contract includes the stabilization provisions

Free License Blocks on Georgian Onshore

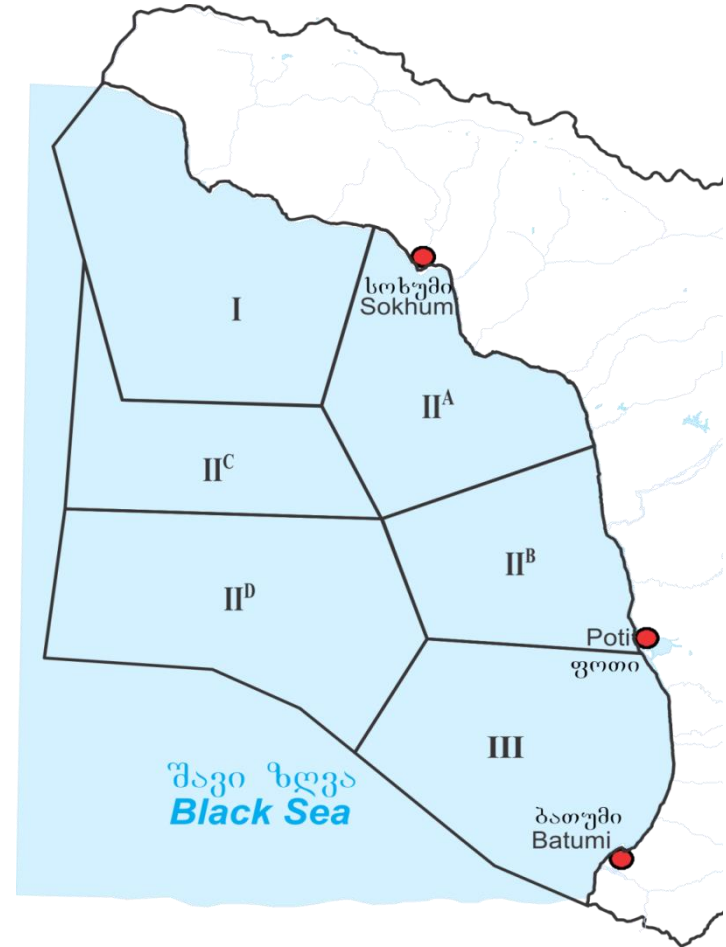
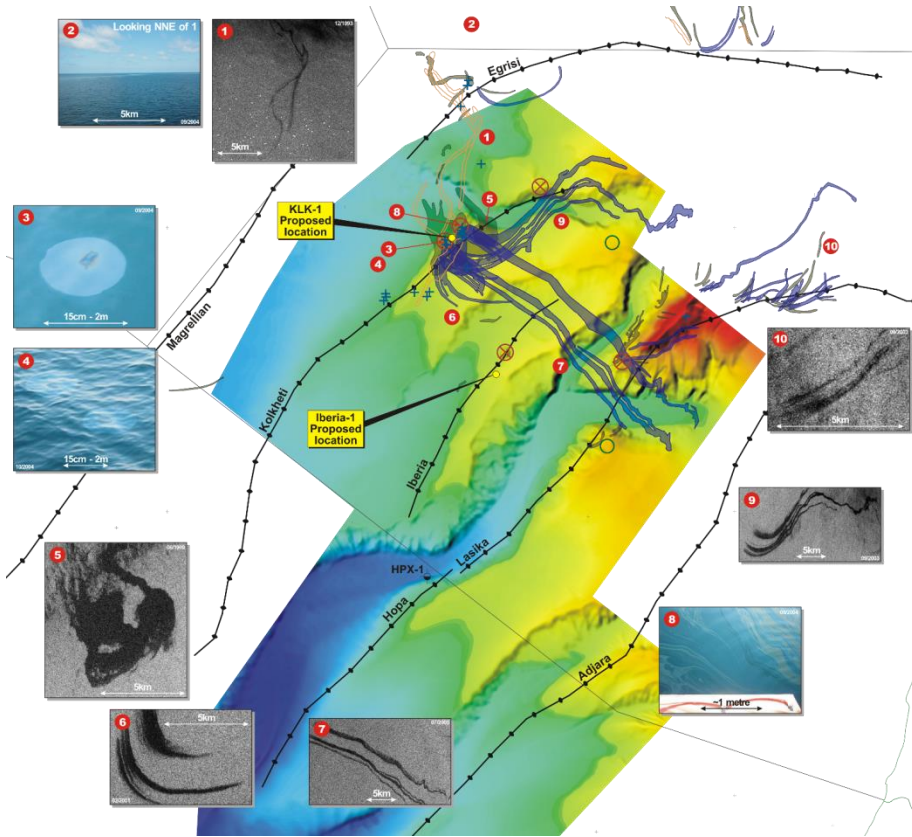
- 7 Undeveloped, Free license Blocks, Mostly Surrounding the Hydrocarbons Producing Area
- Total area 13 500 sq.km.
- Prospective Resources : 180 mln . Tons of Oil

LICENSE BLOCKS OF GEORGIA



GEORGIAN BLACK SEA OFFSHORE

TOTAL AREA 17 891 KM2



The Conducted Exploration Works

Two periods of researches

1 - Soviet period (Before 1991)

- ❖ Regional Aeromagnetic and Gravity survey;
- ❖ Bathymetry, sonar mapping, samples by dragging, shallow well drilling, visual study of the bottom, etc.;
- ❖ Regional Seismic survey, performed in several stages and by different methods. More than 200 exploration and exploitation wells are drilled on 25 sites onshore.

Results:

Offshore

- ❖ Structural maps of different reflected horizons
- ❖ Approximately 25 leads and plays revealed, part of which were considered as prospects.

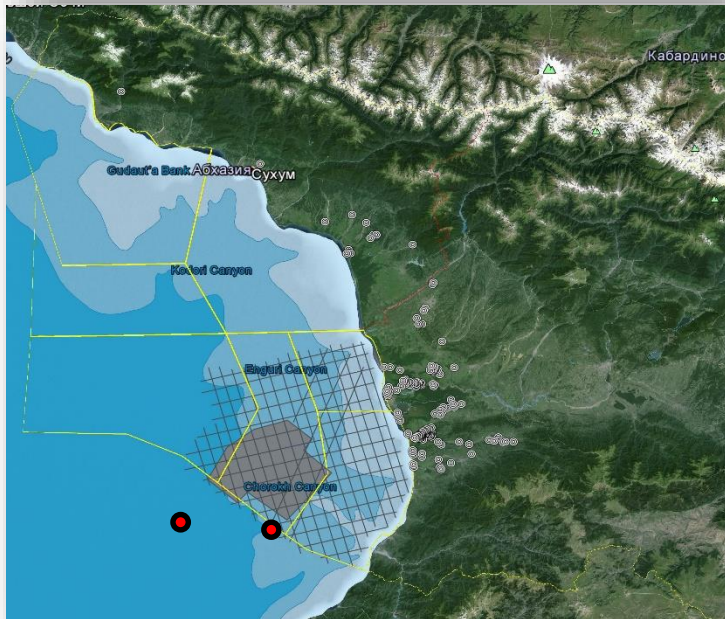
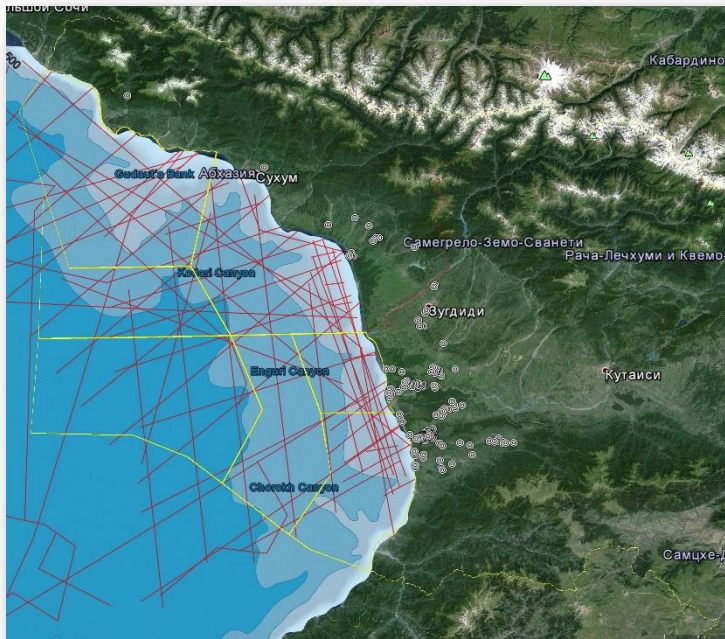
Onshore

- ❖ 5 small fields are discovered and production is underway on 3 of them.

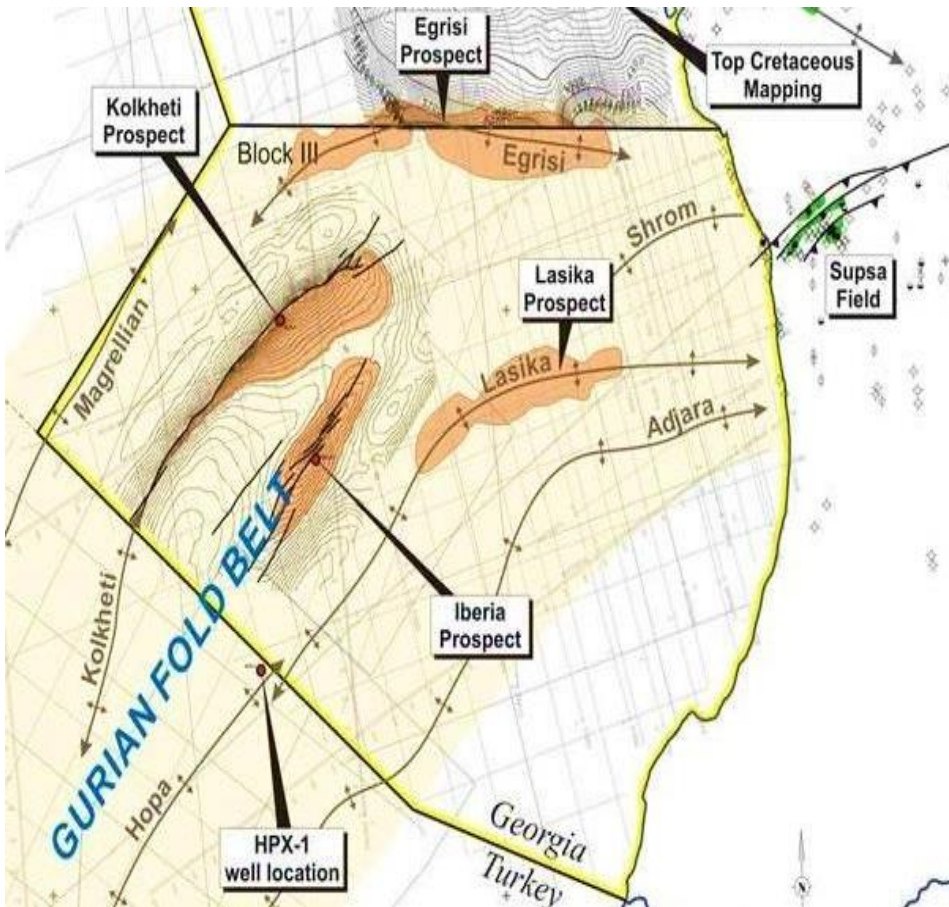
2 - Post Soviet period (after 2000)

In the southern part of Georgian offshore, the US Oil Company “Anadarko” conducted the following works:

- ❖ Seismic 2D surveys - 2398 Lkm
- ❖ Bathymetry
- ❖ Aeromagnetic and gravity survey
- ❖ 3D seismic survey – 1100 km²



SOUTHERN PART OF THE GEORGIAN OFFSHORE



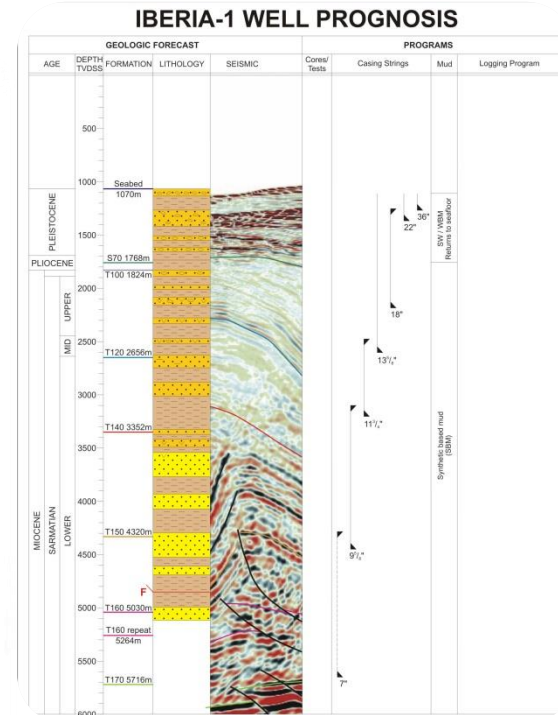
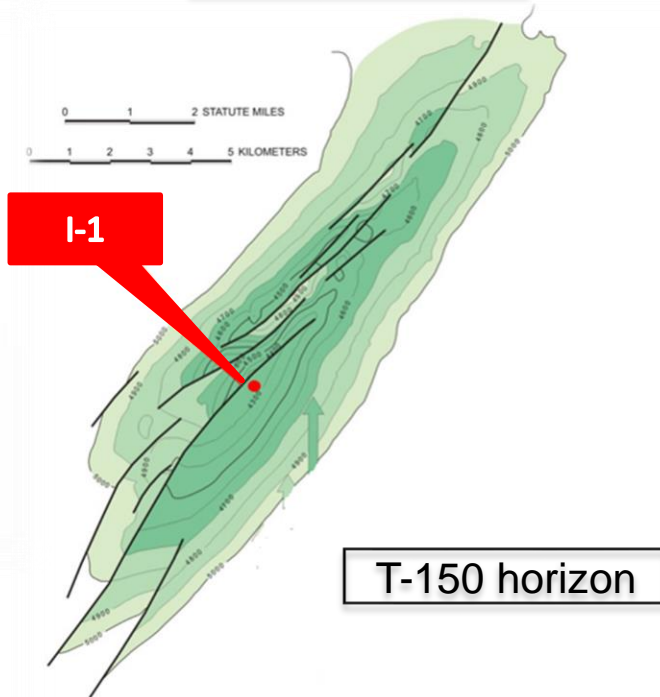
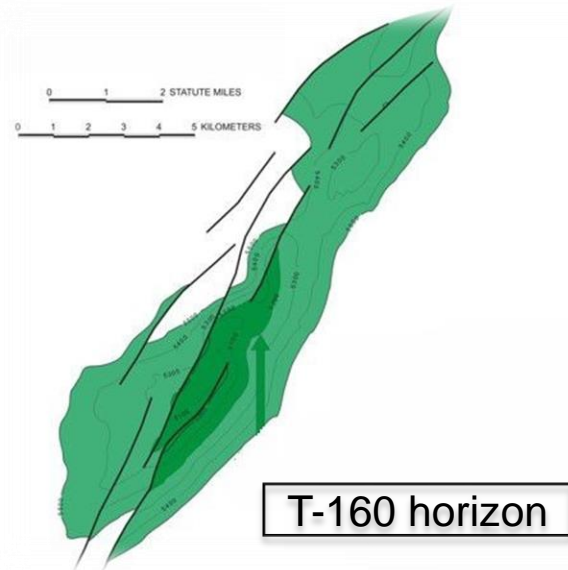
- On the basis of works carried out in 2000-2006, the company “Anadarko” revealed four prospective structures in the southern part of the Georgian shelf. The most promising three local structures (Lasika, Iberia and Kolkheti) were studied with 3D seismic survey.
- Two local structures (Iberia and Kolkheti) were considered to be the most attractive for exploration drilling and the prospective oil resources were assessed: On Kolkheti structure (Lower Sarmatian T-150 horizon) and on Iberia structure (Lower Sarmatian T-150 and T-160 horizons).

4. Petroleum System

4.4 Traps

4.4.2 The southern part (Guria, Ajara)

Iberia prospect



Water depth on the design well section is 1070 m.

Well depth from the bottom is 4646 m.

The entire depth from the sea level is 5716 m.

The well should open all three prospective horizons of the Lower Sarmatian sediments: T-150, T-160 and T-170.

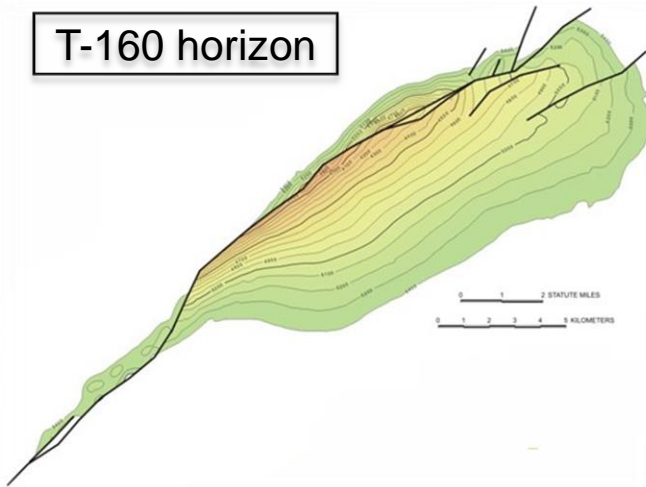
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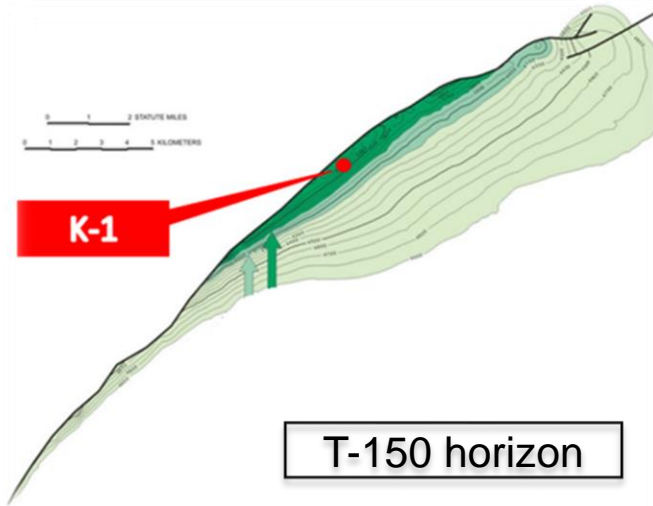
Kolkheti prospect

T-160 horizon

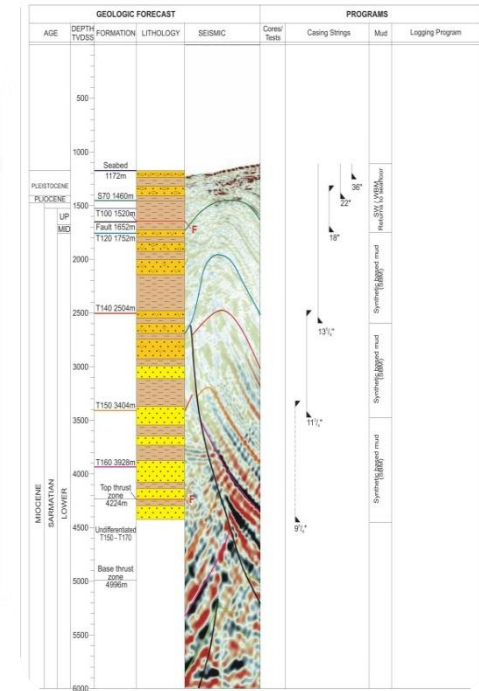


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T-150 horizon



KOLKHETI WELL PROGNOSIS



Water depth on the design well section is 1172 m.

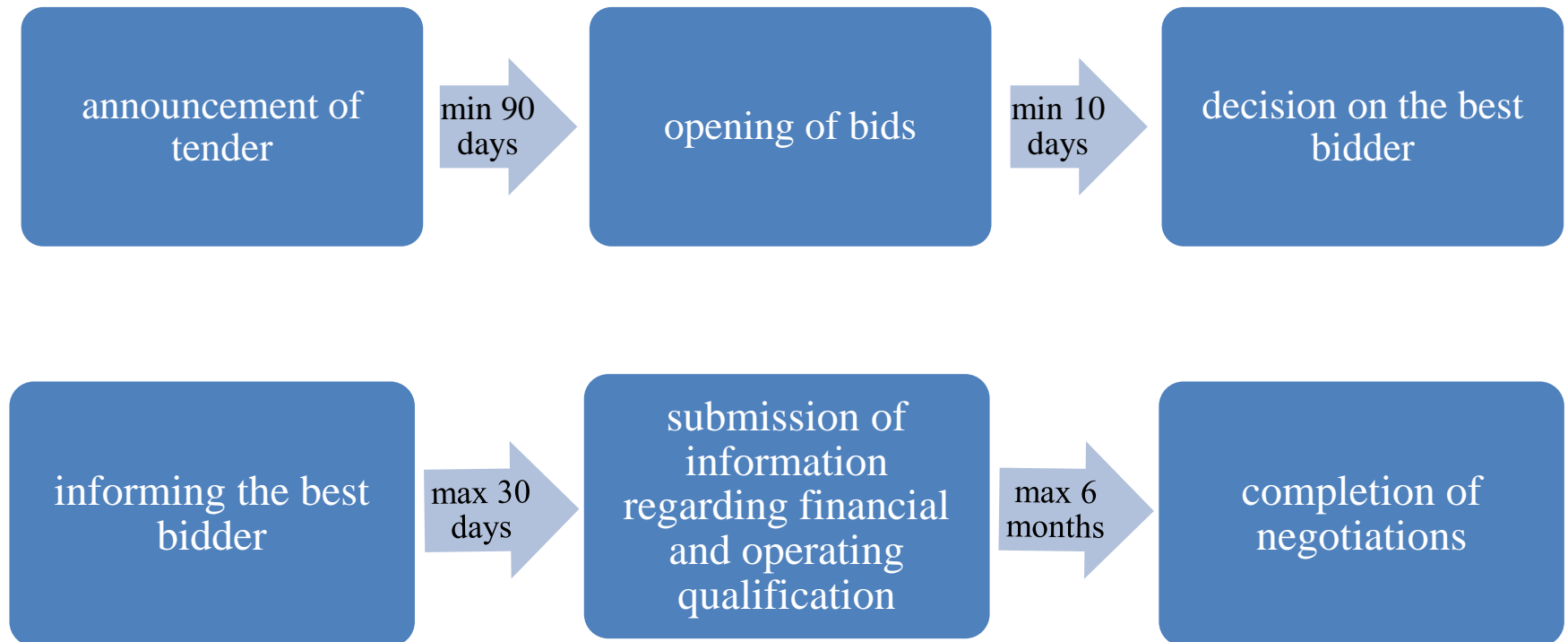
Well depth from the bottom is 3230 m.

The entire depth from the sea level is 4400 m.

The well should open all three prospective horizons of the Lower Sarmatian sediments: T-150, T-160 and T-170.

Tender procedures

- General license for Oil and Gas is issued on the basis of international tender
- Tender conditions include financial and technical terms
- The best bid is determined on the basis of financial terms



Minimal Work/Investment Program

- Depending on specifics of each license block, State determines minimum work program
- Program includes three phases:
 - First phase: studying the existing geological and geophysical data, EIA study, planning field works (6-12 months)
 - Second phase: field geophysical and geological works, rehabilitation works on the existing wells (24-30 months)
 - Third phase: drilling one or two wells (18-24 months)
- After fulfillment of works under the minimum work program and based to the results, the investor identifies the strategy of further works at his discretion.

Appraisal Criteria

- Each financial term offered in the proposal will be appraised with the corresponding value (the higher the proposal - the higher the value)
- The highest value of each term will have its weight expressed in percentage in the total appraisal, according to the priorities
- The proposal that in sum has the highest points will be considered to be the best

Signature bonus	50% of Appraisal
Option	10% of Appraisal
Discovery bonus	10% of Appraisal
Production sharing	30% of Appraisal

EXAMPLE

Conclusion

- According well documented number of international indices, Georgia is considered as a politically stable, corruption-free investment destination with low business costs
- Discovered developing fields can produce several times much HC per year, than current production
- There is sufficient geological potential for discovery of the new, large, commercial fields with production up to several mln.t, in comparison with the early 80-s of last century
- Appropriate active exploration works must be conducted at least in 2 most prospective areas: Tbilisi region and Georgian offshore:
 - such works are already in process In Tbilisi area. Large scale 2D and 3D seismic survey is already done or is under way. The same can be said about drilling
 - offshore - no drilling was conducted yet. It seems necessary to take all appropriate steps in nearest future for launching the drilling operations in this area

**THANK YOU FOR YOUR
ATTENTION**

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