

E&P in Italy

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IENE Hydrocarbon Exploration and
Production in the Adriatic,
the Black Sea and the East Mediterranean



E&P in Italy

1. Petroceltic

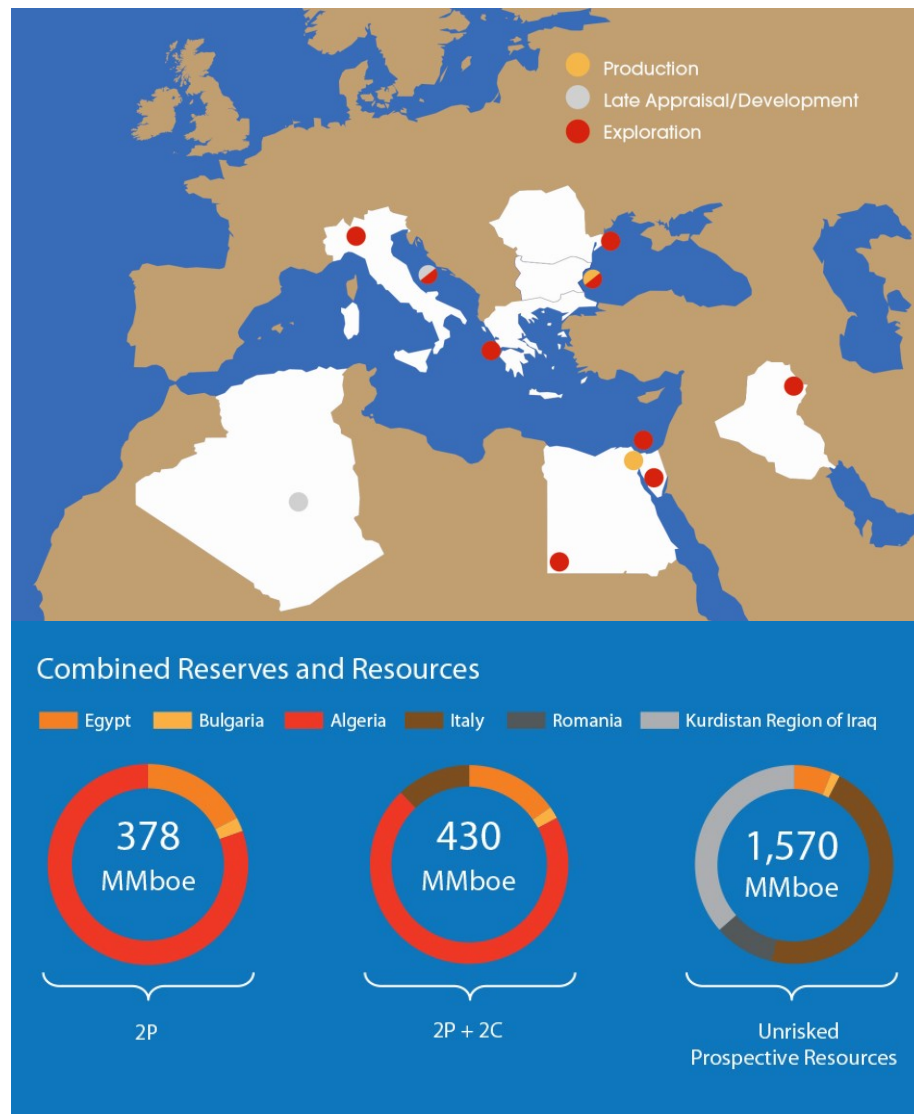
2. E&P in Italy

- Technical overview/ remaining potential
- Regulatory framework
- Fiscal regime
- Competitive landscape
- Infrastructure

3. Petroceltic Projects

Petroceltic: Building a long term regional champion

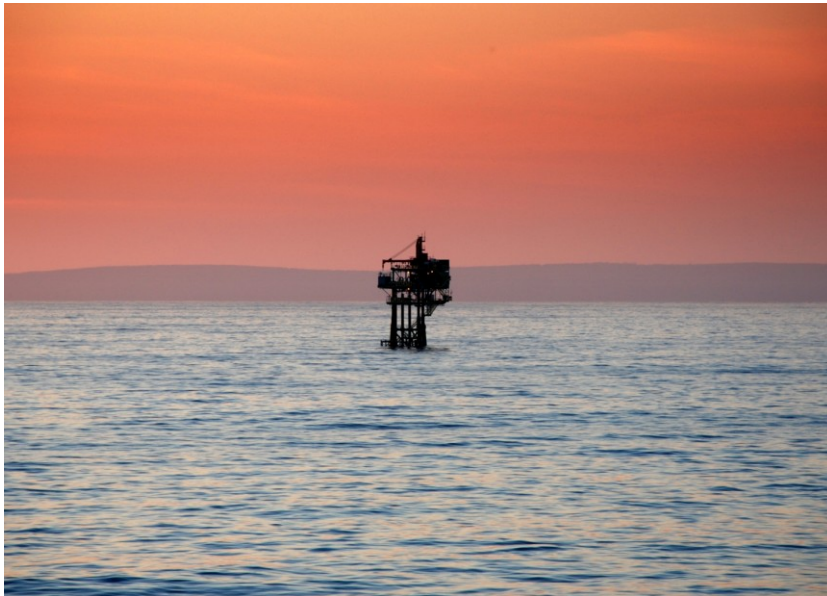
- Core development and production assets in Algeria, Egypt and Bulgaria with production of 24.5 Mboepd(1)
- High impact exploration in Kurdistan Region of Iraq, Romania, Egypt, Italy and Greece
- 2P Reserves of 378MMboe, 2C Resources of 52MMboe and unrisked prospective resources of 1,570MMboe (2)
- Active exploration programme over next 18 months, 8 firm wells and 4 contingent wells
- 2013 refinancing provides financial support for long term strategy
- Algeria project supports long term perspective



(1) Numbers are 1H, 2013, working interest basis

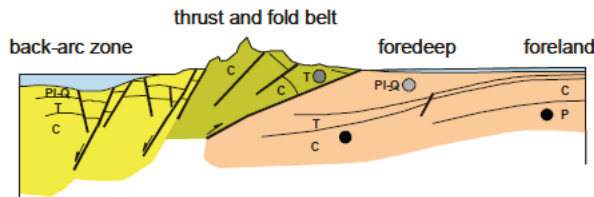
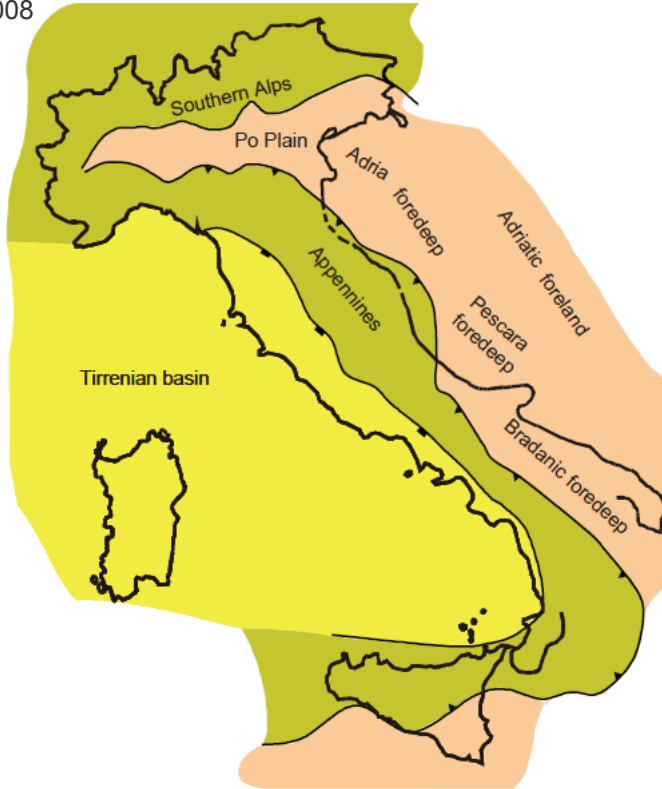
Petroceltic: Strong operational track record

- Full cycle operations from seismic to production
 - Onshore & Offshore
- Commitment to managing operations through:
 - Certified HSES management systems
 - Positive interactions with host communities



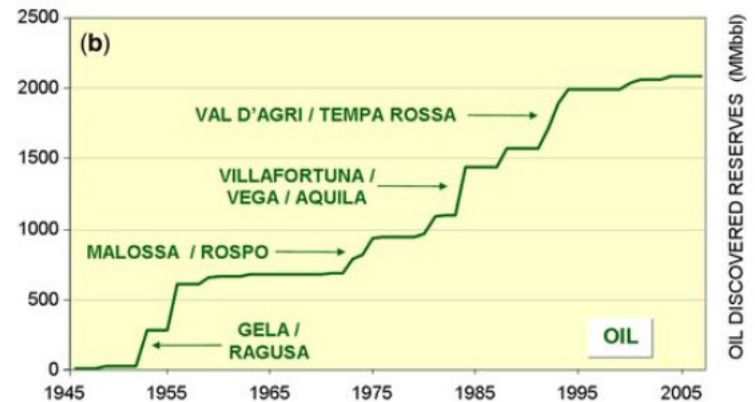
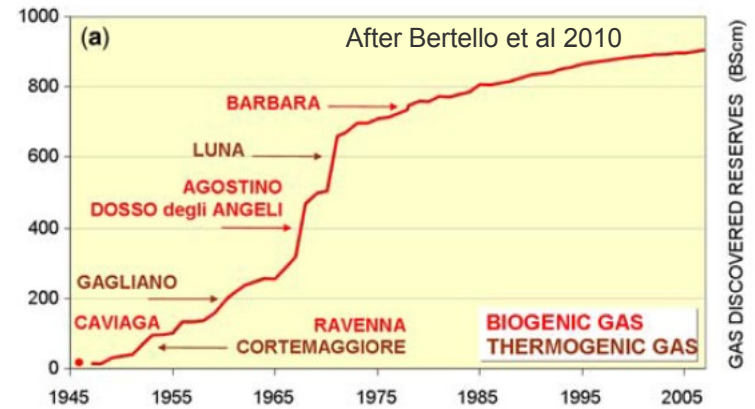
E&P in Italy: a technical review

After Bertello 2008



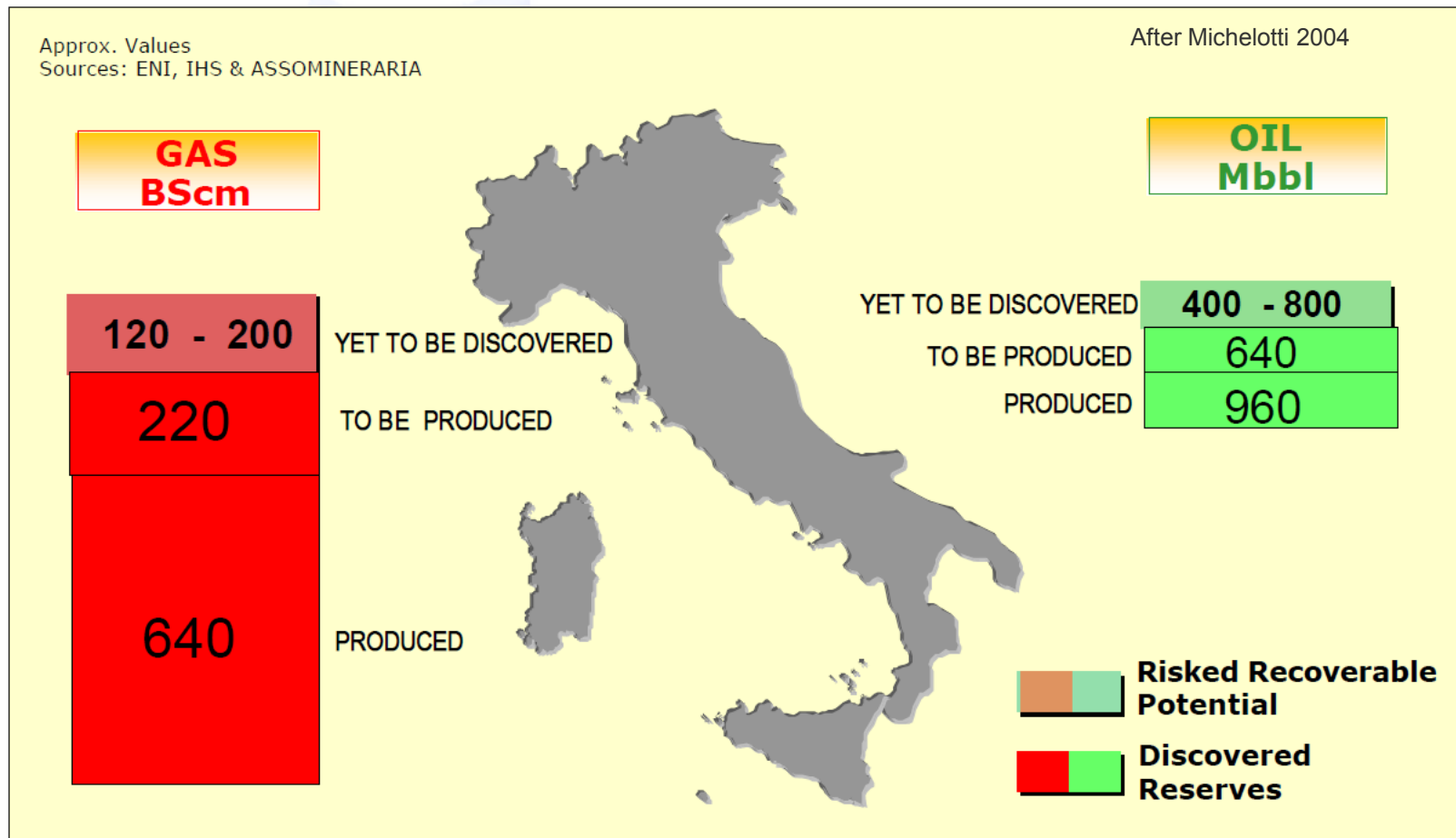
PI-Q foreland – foredeep terrigenous units (Pliocene- Quaternary)
 T foreland – foredeep terrigenous units (Upper Cretaceous-Miocene)
 C mesozoic carbonate units (Upper Triassic – Lower Cretaceous)
 P pre-Carnian units

Hydrocarbon occurrences
 ● biogenic gas
 ● thermogenic gas
 ● oil



- Complex geology -> variety of plays
- Creaming curves indicate
 - Big oil discoveries can be expected
 - Mature for gas – though continued scope for success

E&P in Italy: what's left?



- Southern europe's largest oil & gas producer

E&P in Italy: Regulatory Framework



- Licenses issued by Ministry of Economic Development
- Stringent EIA need approving at several points in the process
 - Offshore authorized by Environment Ministry
 - Onshore by the Regions
- Open Door licensing regime
 - 90 day period for competing applications
- Licence terms standardized
 - 6+3+3 year exploration phasing
 - 20+10 year production concessions
- Deepwater areas gradually being opened up

E&P in Italy: Fiscal Regime

- Italy historically seen as highly favourable fiscal regime
 - Low state take & stable
- Number of recent changes -> increased state take of 55-60%
- System is a tax-royalty system with ground rent paid for the licence
- **Royalty** depends on gas, fluid & location
- **Direct Taxes** consist of 2 elements:
 - National Corporate Income Tax (IRES): 27.5%
 - Robin Hood Tax paid by energy companies: 6.5% when revenue > € 3 mln p.a. and taxable income > € 0.3 mln p.a.
 - Regional Tax (IRAP): 3.9% to 5.0% depending on region (Lazio: 4.97%, Lombardy & Piedmont: 3.90%)

	Oil		Gas	
	Royalty	Threshold Production (mmbo/ yr)	Royalty	Threshold Production (bcf/ yr)
Onshore	10%	0.15	10%	0.88
Offshore	7%	0.38	10%	2.83

Assuming 40° API oil.
Onshore Oil & Gas royalties include 3% contribution to the fondo idrocarburi

E&P in Italy: Competitive Landscape

AleAnna
Resources



adx
ENERGY



CYGAM
ENERGY INC.



Mediterranean
Oil & Gas plc

po valley
OPERATIONS

NORTH SUL
ITALIA S.p.A. a socio unico

petroceltic



ascent
resources plc



EDISON



TOTAL



NORTHERN PETROLEUM PLC



- ~ 30 Operators & 10 Non-Operators
 - Integrated majors
 - Mid-cap & junior E&P companies
 - Energy utilities
- Eni dominant position
 - Government share ~ 30%
- Activity levels at historic low
 - Permitting/ licence to operate issues
- Monti Government National Energy Policy (SEN) Review in 2012
 - Aims to double domestic production
 - Simplify permitting process

petroceltic

E&P in Italy: Infrastructure

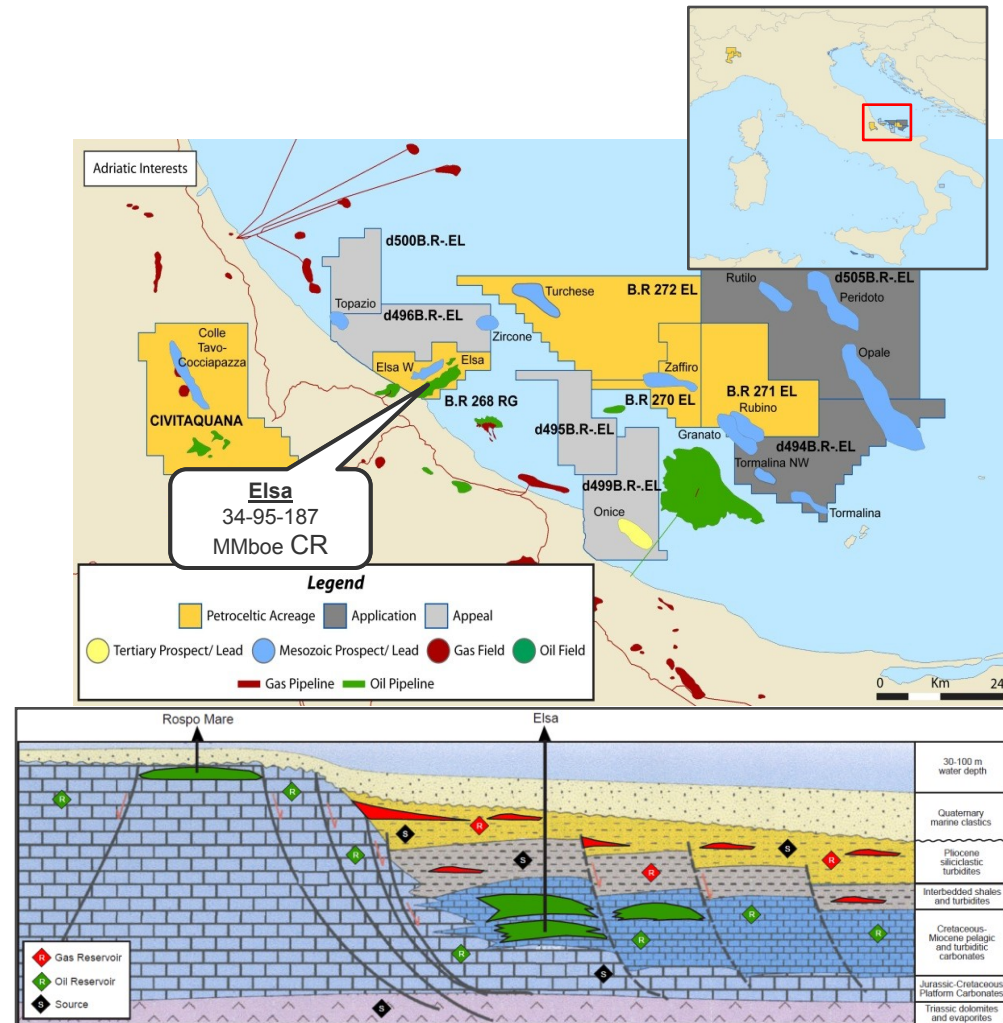
Italian Gas Pipeline System



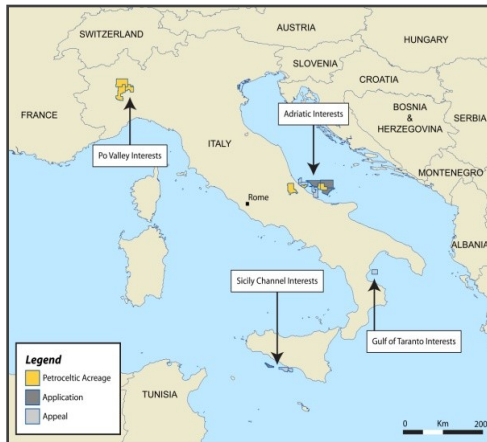
- Highly developed infrastructure for oil & gas
- Gas
 - > 33,000km high & medium pressure pipelines
 - Access to network liberalized
 - 90% demand imported with significant developments expected in import infrastructure
- Oil
 - Export pipelines developed for major discoveries on Po Valley & Basilicata
 - Europe's 2nd largest refining industry: 14 refineries & 18 tanker ports

Petroceltic Italia Projects: Elsa field appraisal

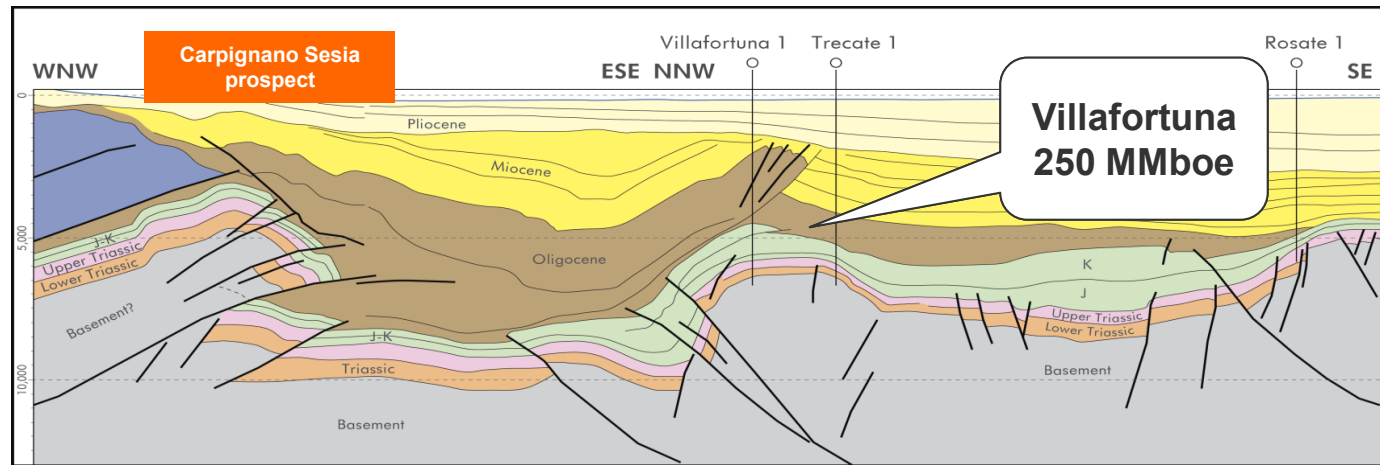
- Petroceltic operated asset (55% WI) discovered in 1992
- Gross 2C contingent resource 95 MMbbls
- 65 metre oil pay zone identified in Cretaceous dolomites, but not tested
- Key technical issues: fluid viscosity and reservoir deliverability
- Planned Elsa-2 well to establish productivity and fluid type
- Stakeholder consultation & resubmit environmental application to drill appraisal well
- Highly prospective regional acreage position provides multiple follow-up opportunities



Petroceltic Italia Projects: Carpignano Sesia Exploration



- Thrusted structure identified to west of producing 250MMbbls Trecate / Villafortuna field and of similar scale
- Triassic fractured carbonate targets - P50 prospective resources 230 MMbbls
- Stakeholder consultation, permitting and well planning in progress
- Request for further suspension of the licence lodged to identify a new well location and drilling plan
- Petroceltic 47.5%, Eni (Operator) 47.5%, Condotte 5%



(modified from Bello and Fantoni 2002)

E&P in Italy: Summary

- Opportunities
 - High remaining resource potential
 - Attractive fiscal terms
 - Mature and liberalized infrastructure
 - Strong local market
 - Well developed service sector
- Threats: “time to market”
 - Complex permitting process
 - “Licence to operate”
- Petroceltic looking for growth opportunities in the region
 - building on Italian/ Black Sea experience
 - Forthcoming award of Patraikos to Hellenic-Petroceltic-Edison JV is a first step!



