

“The Italian opportunity”

Lerici, 17 April 2015



ENERGY TO LIFE

EC European Energy Security Strategy

Renewables

Smart Grids

Energy Efficiency



Integrated Energy Markets

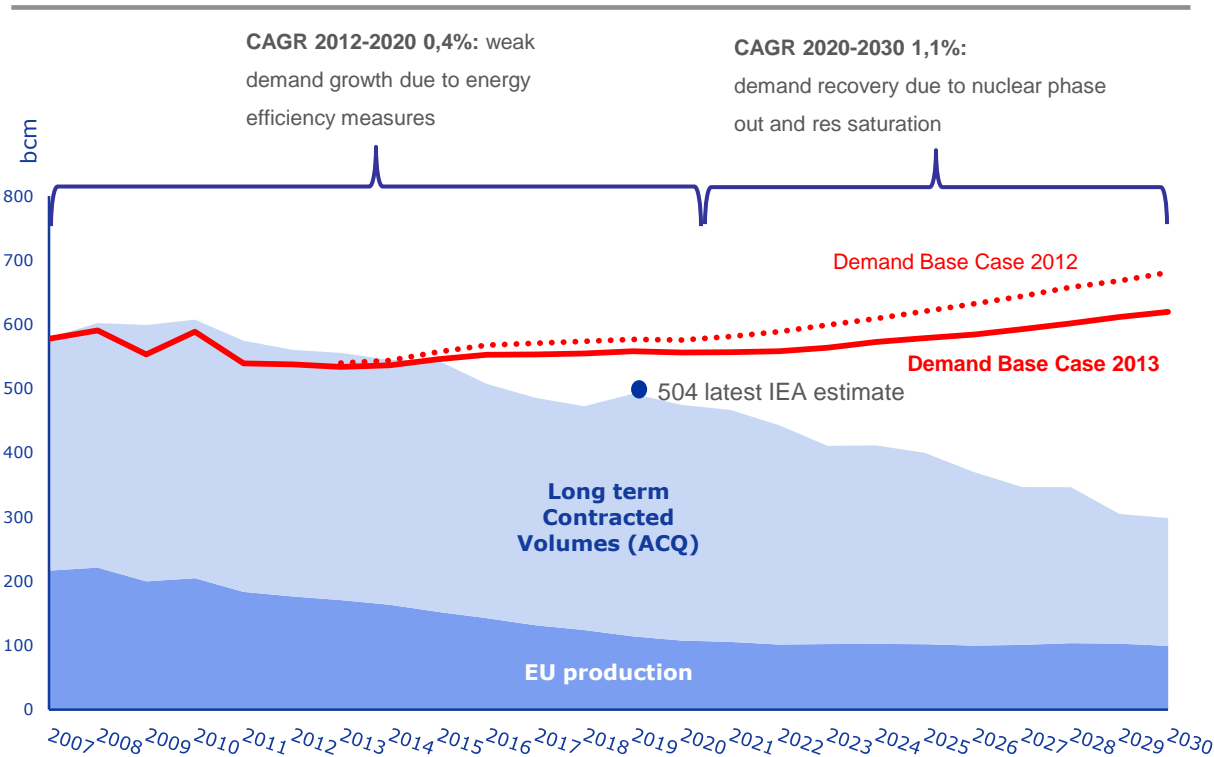
“Europe+” Gas Production

Diversified Gas Sources

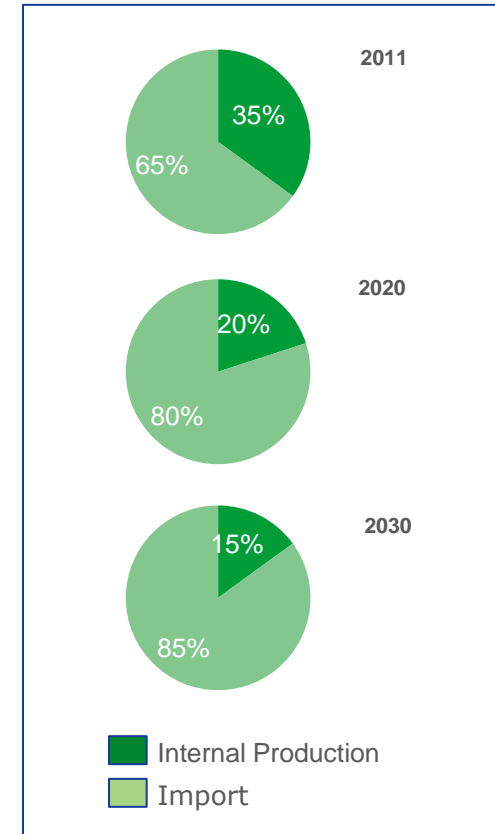
Promotion of sustainable gas production amongst the actions to increase security and competitiveness

European gas balance: new supplies despite limited demand growth

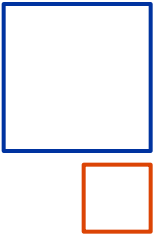
EU 31 demand and supply projections



EU 31 imports dependence



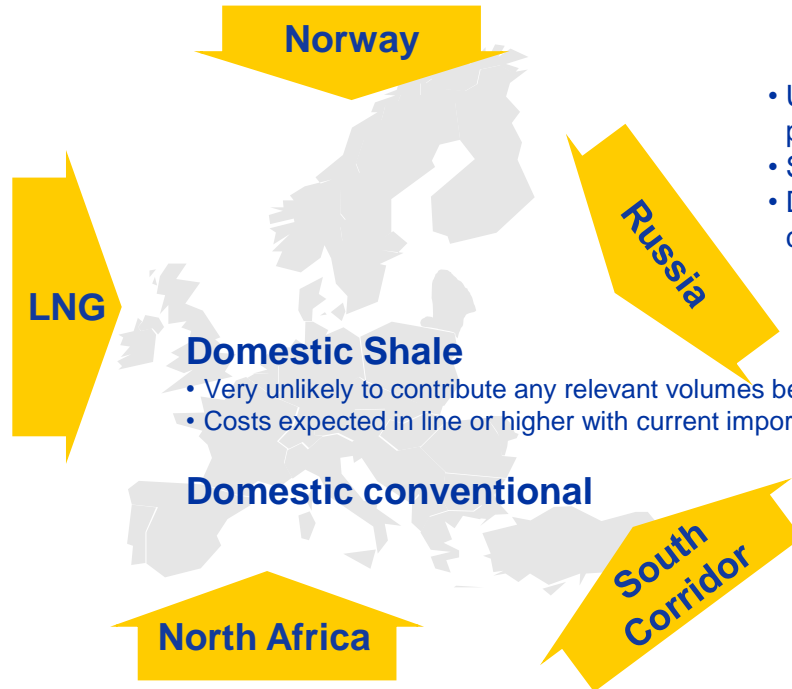
Demand uncertainty, but increasing import dependence even in weak scenario
Need for new gas supplies / contract renewals



Sources of gas available to Europe

- Decline of mature fields
- Unlikely to provide significant additional supplies

- Large liquidity and availability
- US LNG export projects to influence marginal prices in Europe



- Unlimited volumes at the most competitive production costs, below LNG cost
- Significant transportation capacity in place
- Despite Geopolitics Russia remains key to cover European demand

Domestic Shale

- Very unlikely to contribute any relevant volumes before 2025
- Costs expected in line or higher with current imports

Domestic conventional

- Decline of mature fields, limited upstream investment and growing domestic demand limit exports

- 10 bcm from Shah Deniz phase II
- Additional volumes beyond Azerbaijan limited in the short-mid term

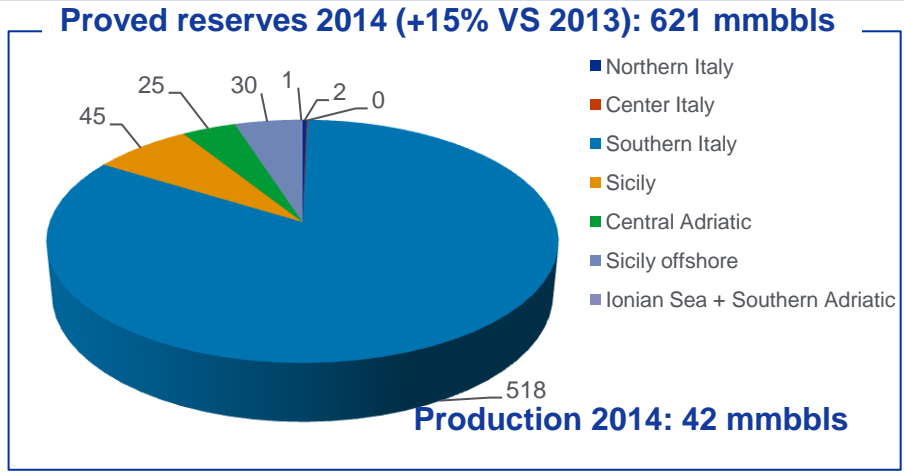
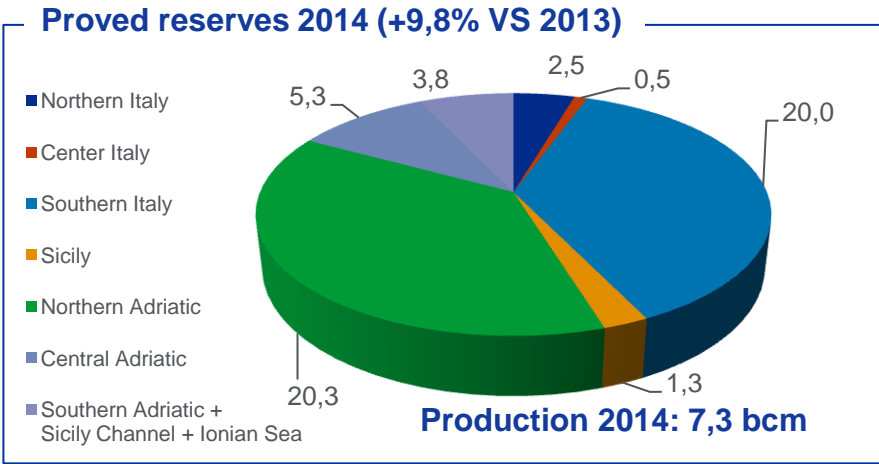
**Additional volumes from Russia and LNG (plus South Corridor)
Preserve hydrocarbons production also in “Europe+”**

Hydrocarbons potential in Italy



138 bcm of total gas reserves (54 bcm *proved*, 60 bcm *probable* and 25 bcm *possible*)

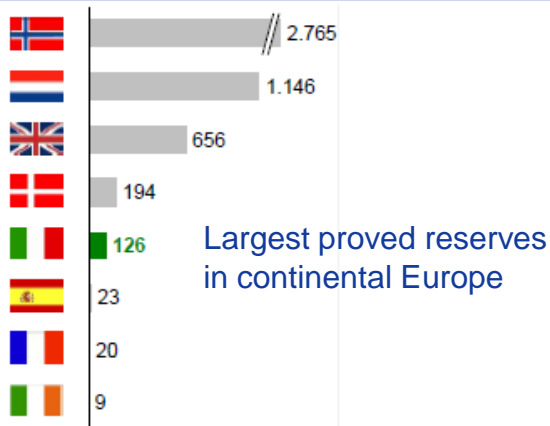
1.700 mmbbls of total oil reserves (621 mmbbls *proved*, 680 mmbbls *probable* and 410 mmbbls *possible*)



Source: 2014 Hydrocarbons Report by Italian Ministry of Economic Development

1 mmtons of oil = 7,33 mmbbls

Italy compared to European countries....

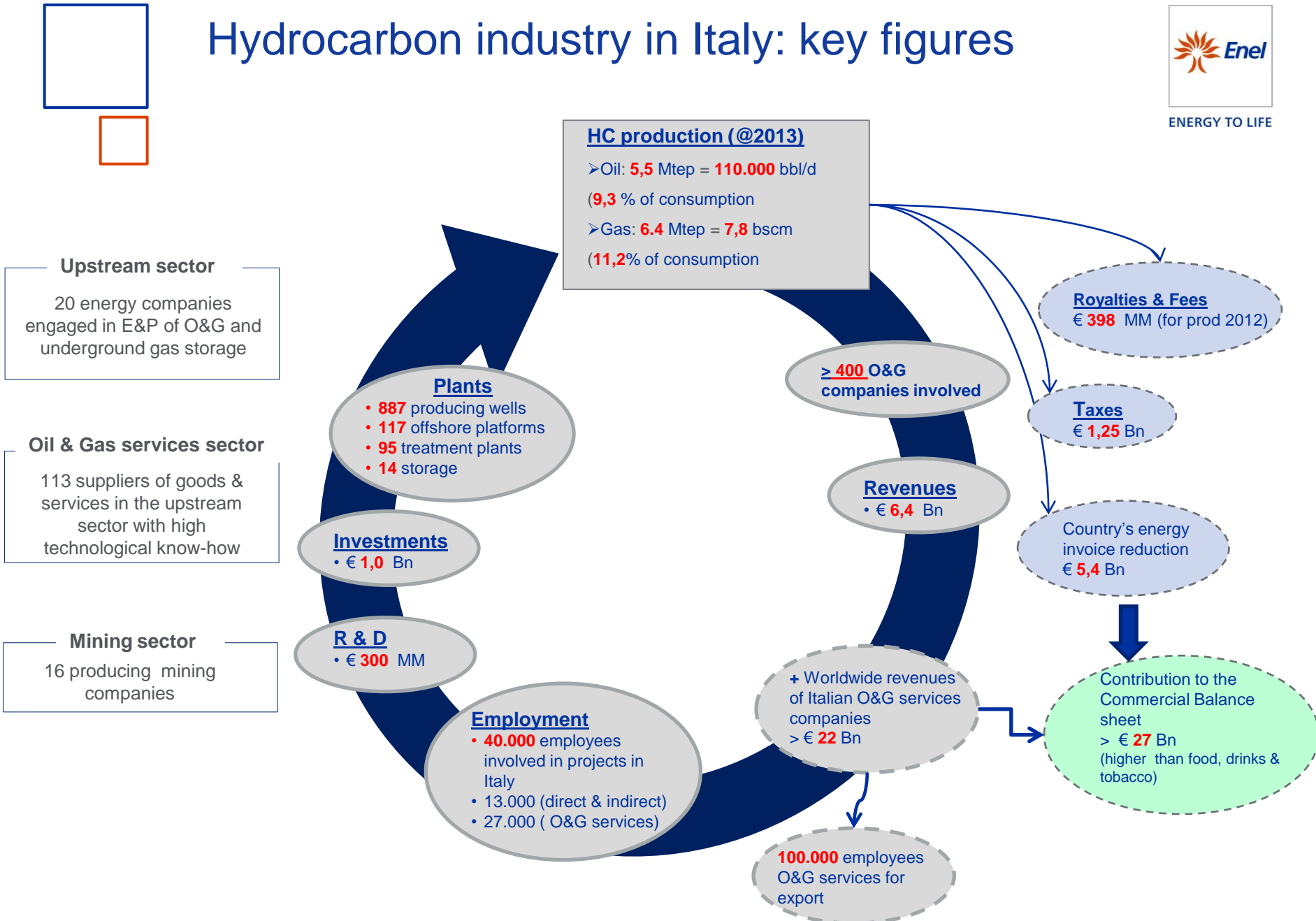


Significant hydrocarbons potential both to be produced and to be discovered

Hydrocarbon industry in Italy: key figures



ENERGY TO LIFE



Hydrocarbons potential in Italy



ITALY HAS A TREASURE UNDER ITS FEET:

- Potential to **cover 20% of Italian demand for 20 years**
- Relatively **high geological Probability Of Success**
- **30-40% lower cost** than import prices and flexibility
- Increase **fiscal revenues by €1-2 Bn/year**
- Decrease **trade balance by €5-6 Bn/year**
- Invest €15 Bn and **create 25,000 jobs**

DESPITE IN THE LAST DECADES LAWMAKERS :

- **Increased royalties** from 7% to 10%
- **Set a Moratorium** on offshore drilling after Macondo accident (Legislative Decree 128 of 2010)
- **Set a transitory Moratorium** on permitting and awarding of new exploration licenses and production concessions in Emilia Romagna, after the earthquake of 2012
- **Award permits in double the time** of other European countries and significantly past the deadlines set by law due to local opposition

..... LEADING TO:

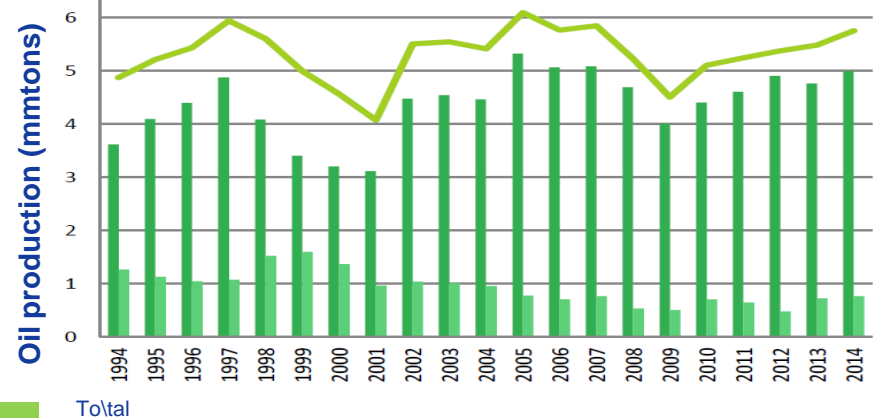
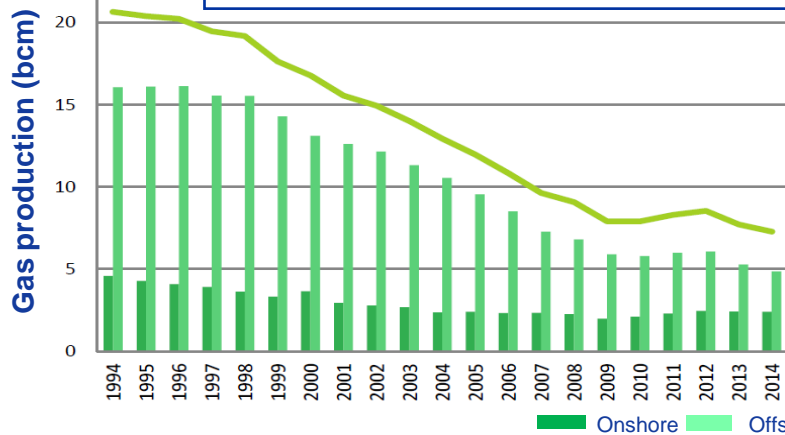
- **Production decrease by 50%** since late 1990's
- **Exploration drop** from 10-15/wells to 1-2 wells/yr

... initiatives to unlock the potentialities of hydrocarbons industry are underway

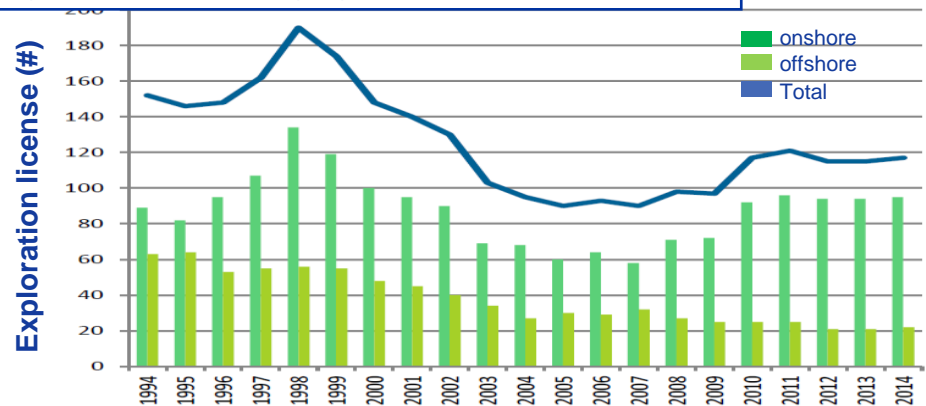
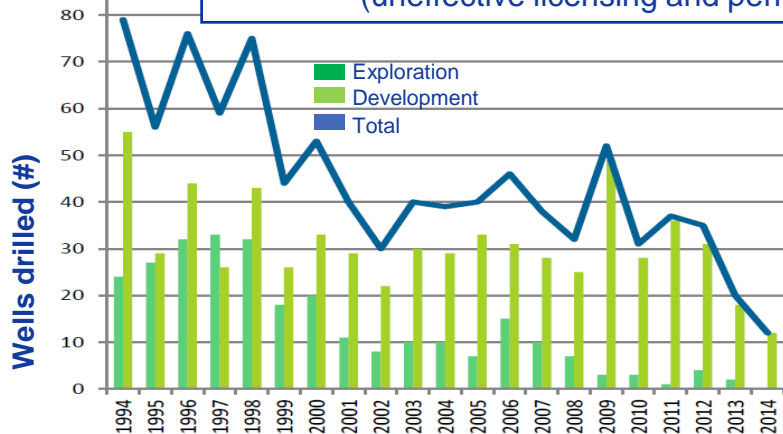
Hydrocarbons production and exploration in Italy



Gas production decrease by 50% since late 1990's (natural decline of mature fields and new projects awaiting authorization)
Increasing oil production (Southern Italy developments)



Drop of exploration wells from 10-15/wells to 1-2 wells/yr and drop of awarded new licenses (uneffective licensing and permitting processes and high government take)



Underway actions by Lawmakers to improve the attractiveness of E&P

2013: approved the National Energy Strategy by Inter-ministerial Decree



Actions

2020 target

Licensing

- Issuing of a **single license** for both exploration and production activities, compliant with the undertakings of EU parliament
- Define a binding deadline to get required approvals by local stakeholders

Permitting and governance in regulatory

- **Simplify and reduce** the authorization processes involving local stakeholders (Intesa Regione)
- Increase coordination within Italian lawmakers (Authority, MiSe, Government)
- Increase coordination with EU regulations

Development of local territories

- Increase benefits to local territories in terms of higher revenues and increase of local employment

Safety and environmental protection

- Improve safety measure of operations, mainly off-shore

• **Domestic production:**
from 7 to 14 % of consumption

• **Investments:**
15 Billion €

• **Energy Bill Reduction**
5 miliardi €

Increase investments in domestic production

2014: approved Decree n. 133 of 12/09/2014 ("Sblocca Italia")

Challenges

Art. 38

(measures for the valorization of national energetic resources)

- Distinct licenses to be awarded for exploration and development/production stages
- Long time for licenses awarding (~3,5 yrs for exploration licenses , ~9 yrs for production concessions)
- Many authorizations required and "actors" (local and central) involved

Art. 36 and 36 bis

(measures for the economic and employment development of HC producing Regions)

- Economic development of Regions with hydrocarbons producing fields

Improvements introduced

- E&P activities recognized as "*urgent*", "*Strategic*" and with "*public interest status*"
- the responsibility of onshore upstream projects environmental assessment (EIA) transferred from Regions to Ministry of Environment,
- Introduced a **unique mining title**:
 - for exploration (6 yrs) and exploitation (30 yrs), possible postponements
 - awarded within 180 days
 - by Ministry of Economic Development
 - upon agreement with Region (onshore projects)
- Allowed local public spending exceeding local budget constraints set by Central Government (Patto di Stabilità)
- Institution of funds fed by hydrocarbon royalties and local taxes to promote economic development and benefits to the local population

Simplifying and making more efficient authorization procedures

2015: Energy Tax Surcharge (“Robin Hood Tax”) ruled out as unconstitutional

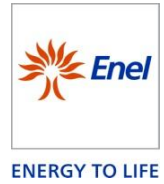
E&P Key fiscal terms - Italy

| | |
|----------------------------|---|
| Bonuses | No |
| Corporate income tax | 27,5% |
| Regional Income Tax (IRAP) | 3.5% - 4.5% starting from 2014, each Italian region may increase 3,5% up to 1 basis points |
| Robin Hood tax | 6,5% |
| Royalties on Revenues | Yes |



| Production | | Exempted production quota | Royalty rate | “Fondo idrocarburi” Additional rate | “Aliquota ambiente e sicurezza” Additional rate | Total |
|------------|------|---------------------------|--------------|--|--|-------|
| Oil | Land | 20.000 tons | 7 % | 3 % | | 10% |
| | Sea | 50.000 tons | 4 % | | 3 % | 7% |
| Gas | Land | 25 million cubic meters | 7 % | 3 % | | 10% |
| | Sea | 80 million cubic meters | 7 % | | 3 % | 10% |

2015: Enel Italian portfolio

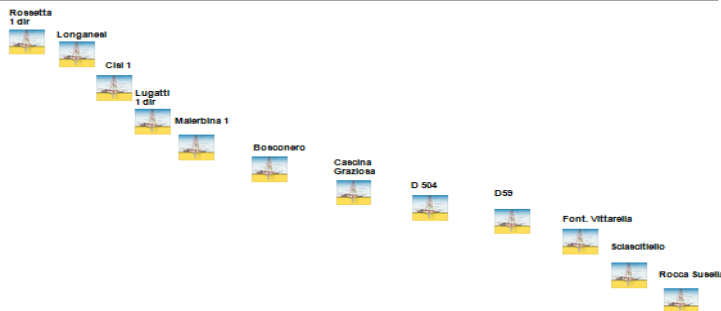


Portfolio

- Legenda**
- Titoli Enel**
- Istanza di concessione di coltivazione
 - Istanza di permesso di ricerca
 - Permesso di ricerca



H1 2015 H2 2015 H1 2016 H2 2016 H1 2017 H2 2017 H1 2018 H2 2018 H1 2019 H2 2019



5 year capex \$50 million for identified prospects. Non committed

Development

- Longanesi field development (Bagnacavallo license)
 - Po Valley Pliocene Play
 - Ownership: 66.5% Gas Plus (operator), 33.5% Enel
 - Reserves 4.3MMboe Enel share (Woodmac certified)
 - First gas expected in 2017 (Enel estimate)

Exploration

Exploration activities include:

- Italy
 - 6 exploration permits and 14 applications
 - **3 near field prospects** identified in a **mature Pliocene play** to be drilled in 2015-17 – low cost, low risk
 - Longer term high impact plays: **South Appennine oil play analogue** in Gulf of Taranto and Central Apennines and **Triassic oil play** in NW Po Valley and Central Adriatic – high quality acreage with low/no commitment at 100% participation interest with possible funding through early production in Po Valley and sequential farm out