



GDF SUEZ

ÊTRE UTILE AUX HOMMES



IGU Study Groupe 1.3 Gas Rent and Mineral Property Rights

Evolution of fiscal regimes through time – Dutch and UK example

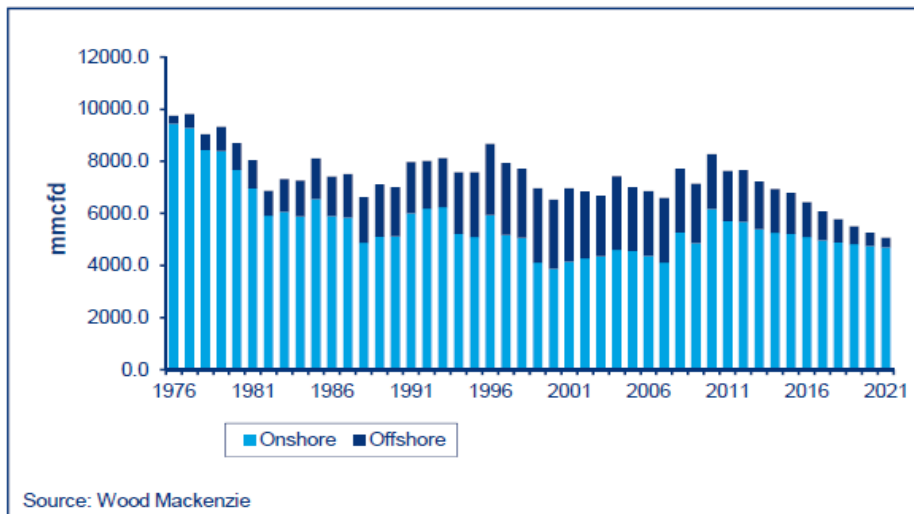
4-7 September
2013

Flexibility / adaptation of fiscal regimes

The Dutch example (1/2)



Gas Production by Region



- *Mature Country – One main onshore field : Groningen (1959)*
- *Global production remains stable since 1995 (70 mmcf/d)– expected to decrease after 2015 - offtake guaranty by GasTerra*

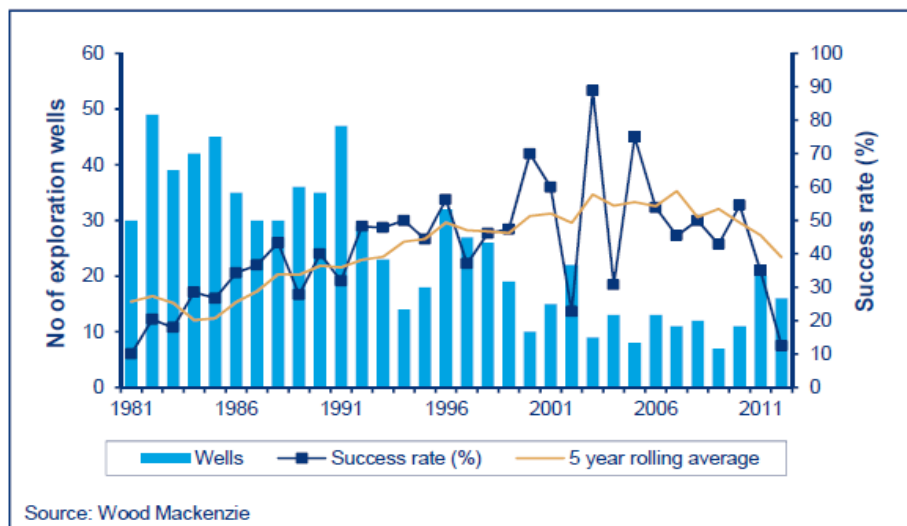
- *Average success rates have been steadily increasing to a 40-50% - low risk near fields wells*

- *Remaining reserves : 6500 mmboe (Initial 28600 mmboe)*

- *Competitive and active market*

Main challenges: large historical producer, one giant onshore field, mature country

Drilling Activity and Commercial Success Rates



Evolution / adaptation of fiscal regimes

The Dutch example (2/2)



Prior 1995 : no participation to exploration costs

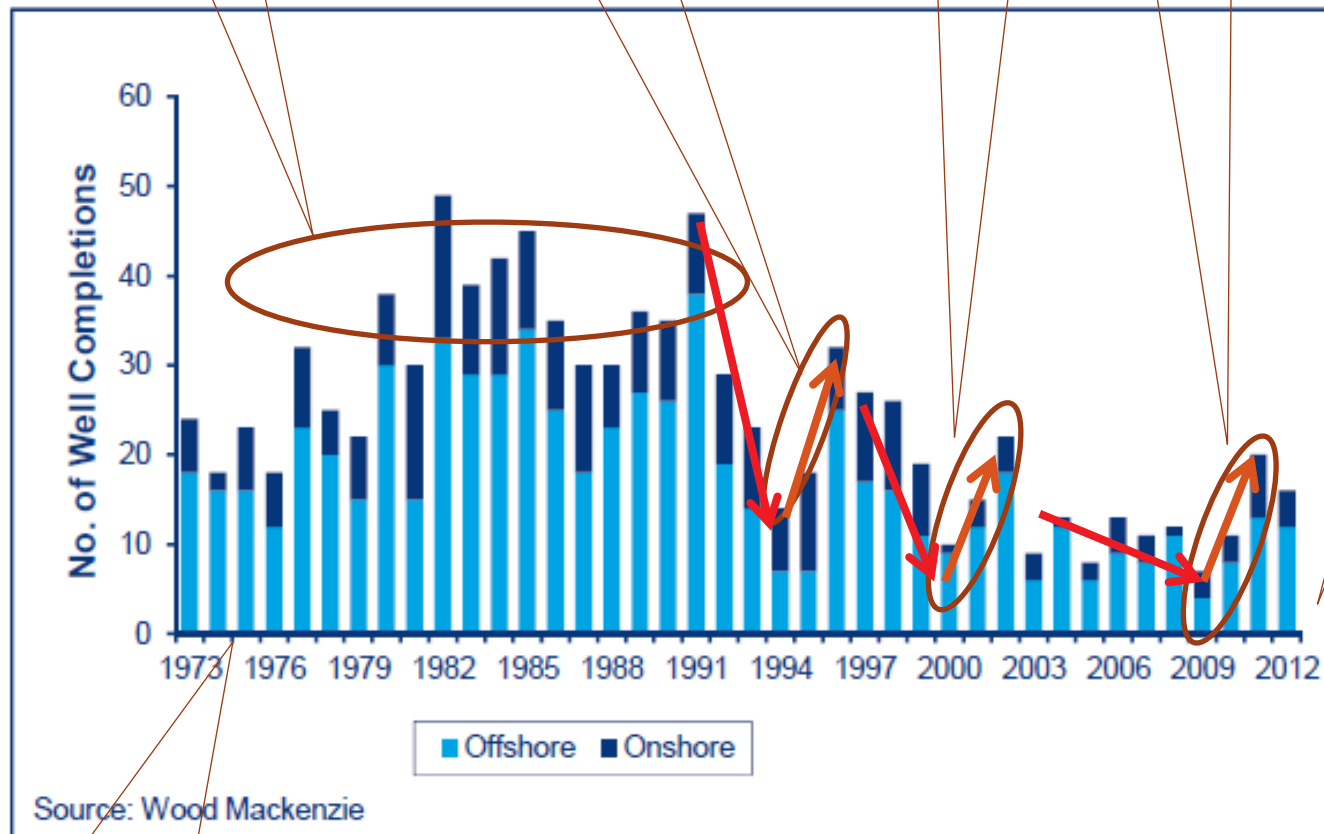
1995 : Contribution to exploration costs in case of commercial discovery

2000 : Contribution to exploration costs, also in case of dry hole

2010 : New marginal fields incentives and Fallow acreage convenants

And Now:
Onshore again?
Ultra marginal fields?

Exploration Drilling by Region



Source: Wood Mackenzie

1974 : « Small Fields Policy » guarantying gas purchase for newly discovered small fields

► *Ebn now considered as a typical partner (risks / rewards approach)*

■ Necessity to attract investors and lower their risks on marginal assets

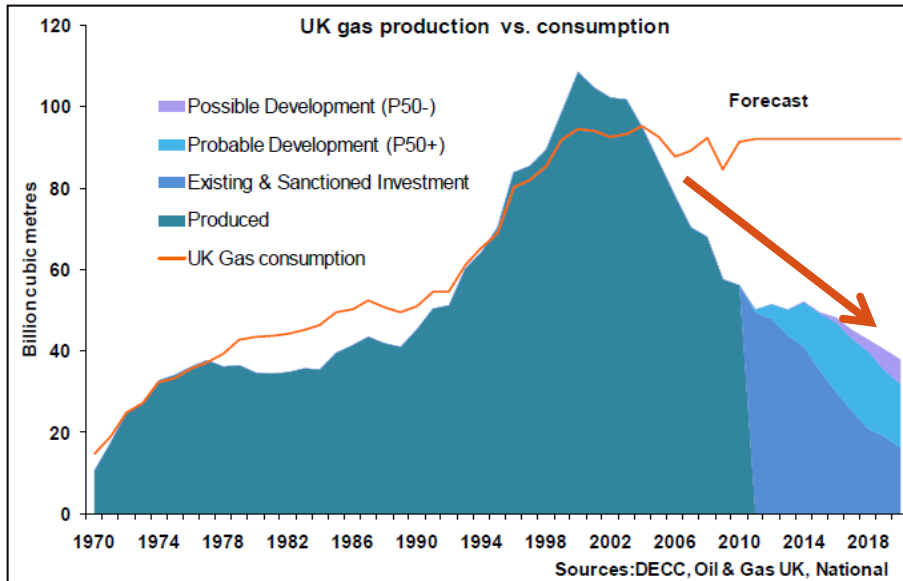
► *Incentives to take advantage of existing offshore hubs and pipelines*

■ Preverve the existing infrastructure and allow near field exploration

► *Long term view of preserving Groningen field and maintaining gas balance position*

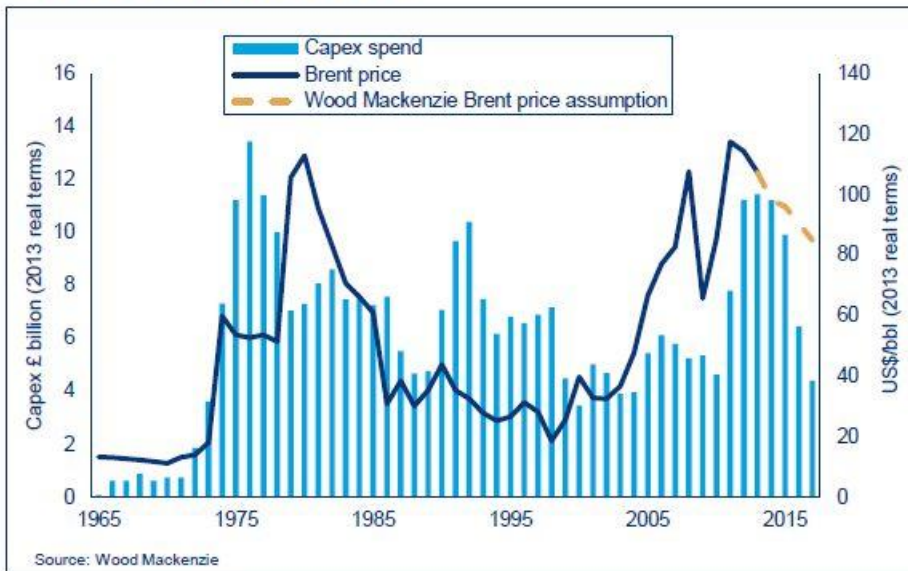
Evolution / adaptation of fiscal regimes

The UK exemple (1/2)



- *Large mature country, facing production decline – with still highly prospective provinces (WOS,...)*
- *Very competitive environment – large number of actors and M&A deals – level of capex investment remains high*
 - Fiscal environment can be changed without dramatic loss of actors
- *Technological boundaries have been constantly pushed away (accessing more challenging environment, unlocking potential in mature areas)*
 - Specific fiscal regime have been set-up for highly challenging environment
- *Main challenges ahead : redevelopment / decommissioning costs / ageing infrastructure*
 - Specific fiscal conditions possibly to be set up to address those challenges and limit production drop

Capex spend and Brent price by year

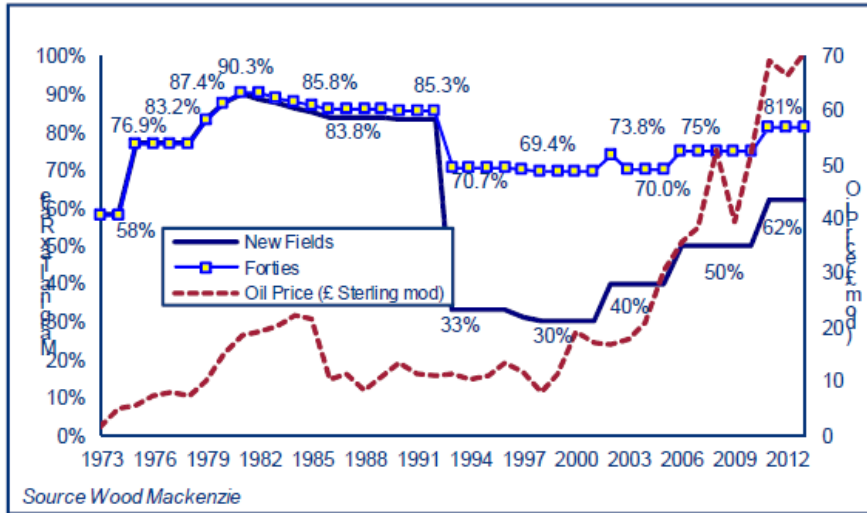


Evolution / adaptation of fiscal regimes

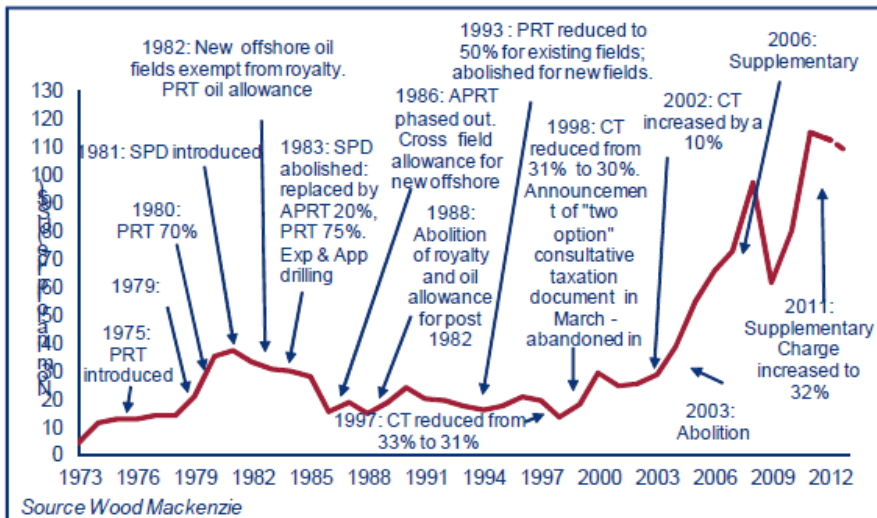
The UK example (2/2)



Top Marginal Rate of Tax for New Fields and Forties with Oil Price (£ money of the day)



Major Oil Taxation Changes 1973 to 2011



▶ **competitive system – where government's share is evolving/ adapting relatively to economic conditions**

▶ **Since 2009 – introduction of specific allowances, depending on detailed technical conditions**

- Marginal fields allowance (< 26 mboe)
- Heavy Oil allowance
- HP / HT fields
- Remote deep water gas fields
- Research allowance (exploration costs)
- Shallow water gas fields (eg. Cygnus)
- Brown field allowance
- Certainty on decommissioning tax relief
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▶ **Fiscal incentives on shale gas currently being studied**

▶ **Changes are generally applied following discussions with stakeholders (companies, investors...)**

- These discussions aims at limiting potential instability that would hamper investment

Conclusions



- ▶ ***Fiscal terms should be fixed carefully depending of different parameters***
 - Long term strategic view and high level objectives from National Bodies
 - Level of maturity of the basins
 - General economic conditions
 - Technical complexity
 - Level of competition,...

- ▶ ***Fiscal system should be designed for adequate sharing of risks and rewards between industry and public bodies – all along the value chain (from exploration to decommissioning)***

- ▶ ***Flexibility in fiscal regimes is necessary in order to overcome and meet specific challenges (eg. boosting exploration, development of submarginal fields, decommissioning, etc) while preserving long term visibility and confidence between the different parties. Flexibility should not mean instability.***

- ▶ ***Case by case studies are necessary to optimise Fiscal terms and account for the specificities of each country. These studies should be updated regularly.***



Thank you for your attention

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