

Peru Field Trip September 2010

Upstream Repsol
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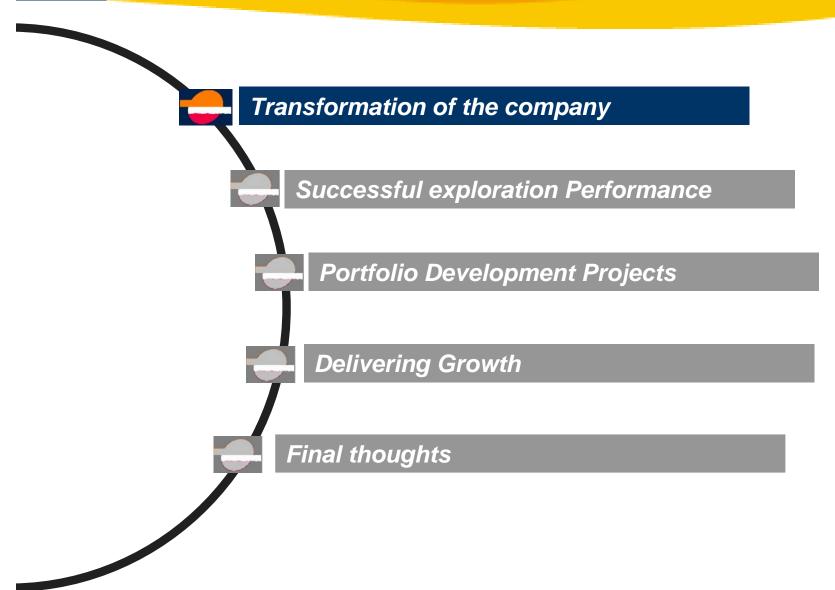
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Repsol Upstream: A successful transformational story



	Year 2005	Year 2009	
Production (MBoe)	158 (106 Mboe adjusted by contractual changes	s) 122	
Exploration investment (M €)	230	600	
Annual Contingent Resources added (MBoe)	93	738 ⁽¹⁾	
RRR (%)	15%	94%	
Upstream Core areas	North Africa Latam North	North Africa Latam North	•US GoM •Brazil
Portfolio of key projects	Gassi Touil (Algeria)Canaport (Canada)	 Shenzi (US GoM) I/R (Libya) Canaport (Canada) Peru LNG Kinteroni (Peru) Margarita- Huacaya (Bolivia) 	 Guará (Brazil) Carioca (Brazil) Piracucá (Brazil) Reggane (Algeria) Carabobo (Venezuela) Cardon IV (Venezuela)
Technical staff	864	1,487	
	Higher growth potential, greater visibility		

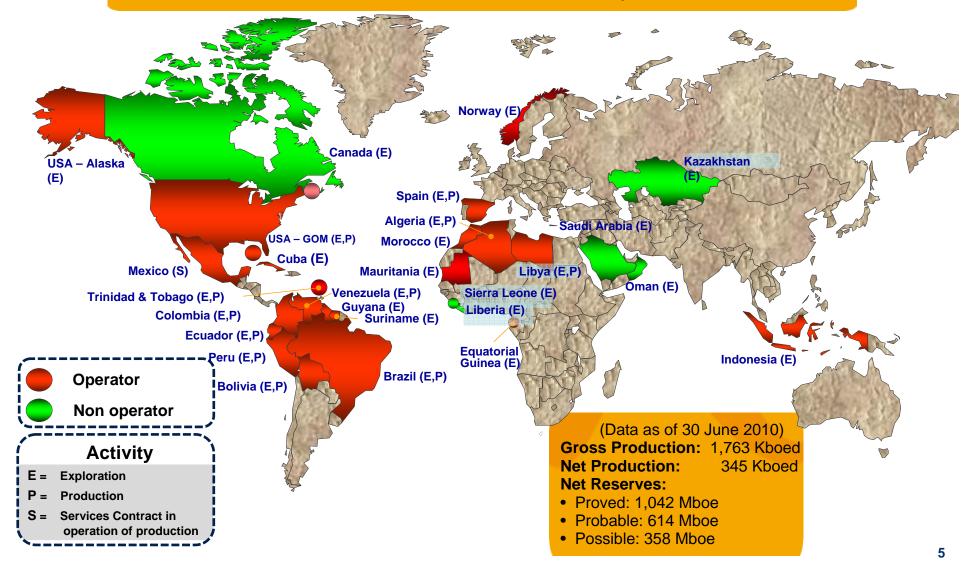
^{1.} Contingent resources evaluated at August 2010. Brazil evaluated by independent consultant



A successful transformational story: Regional focus



REPSOL: E&P ACTIVITY IN 26 COUNTRIES, OPERATOR IN 20





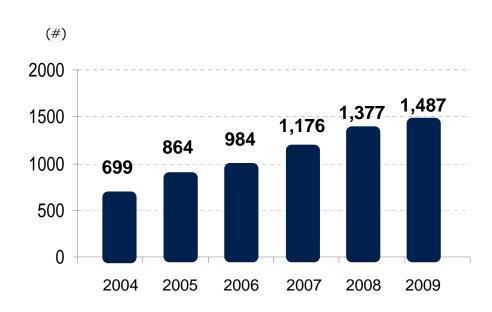
Repsol Upstream success built on human, technical and technology capabilities (I)



Since 2005, transforming Upstream organization and processes to face large number of projects

- Strategic investment in human capital to support the growth
- New organizational structure set up, including global Exploration Division
- Redesign and standardization of technical and business processes
- Implementation of Quality of Operations organization
- Increased accountability throughout the organization

Technical staff size





A technology answer to our project challenges



Upstream Technology Themes & Objectives

Reservoir Characterization & 3D Geomodeling

Brazil, North Africa, Bolivia, Venezuela, Algeria, new exploration wells ...

Fluids Characterization

Margarita (Bolivia), Kinteroni (Peru), Perla & Carabobo (Venezuela), Carioca, Guara (Brazil), GoM, Reganne (Algeria), West Africa, Norway, ...

Resources Transformation (Recovery & Optimization)

Brazil presalt carbonates, Perla & Carabobo (Venezuela), Margarita (Bolivia), Casablanca (Spain), Reganne (Algeria)

Well Technology & Geomechanics

All E&P projects; Brazil, GoM, West Africa, Norway,...

Offshore Facilities Carioca, Guara (Brazil), Buckskin (GoM), T&T, Perla (Venezuela), West Africa, Norway

Unconventional Oil & Gas

Oil in Carabobo (Venezuela), Gas in Spain, Morocco, ...

LNG Technology Floating LNG Brazil, Atlantic LNG (T&T), Peru LNG, Canaport (Canada), BBG (Spain), Perla (Venezuela)

Specialized collaborative teams

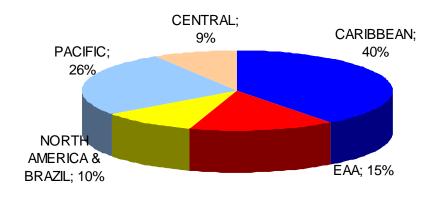
Technology Reference Specialists Upstream Strategic Plan 2010-2014



Rebalance Group portfolio towards new core business



CAPITAL EMPLOYED @ 31 dec 2005



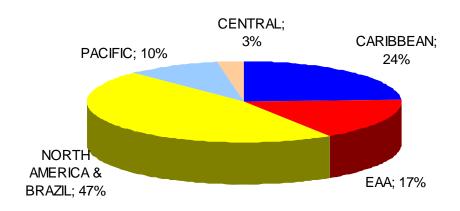
■ CARIBBEAN
■ EAA
■ NORTH AMERICA & BRAZIL
■ PACIFIC

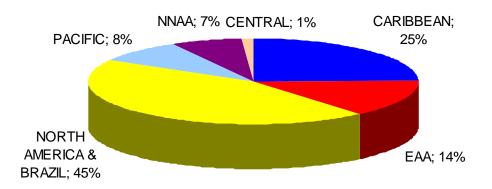
CAPITAL EMPLOYED @ 31 dec 2009

CAPITAL EMPLOYED @ 31 dec 2014

■ NNAA

CENTRAL







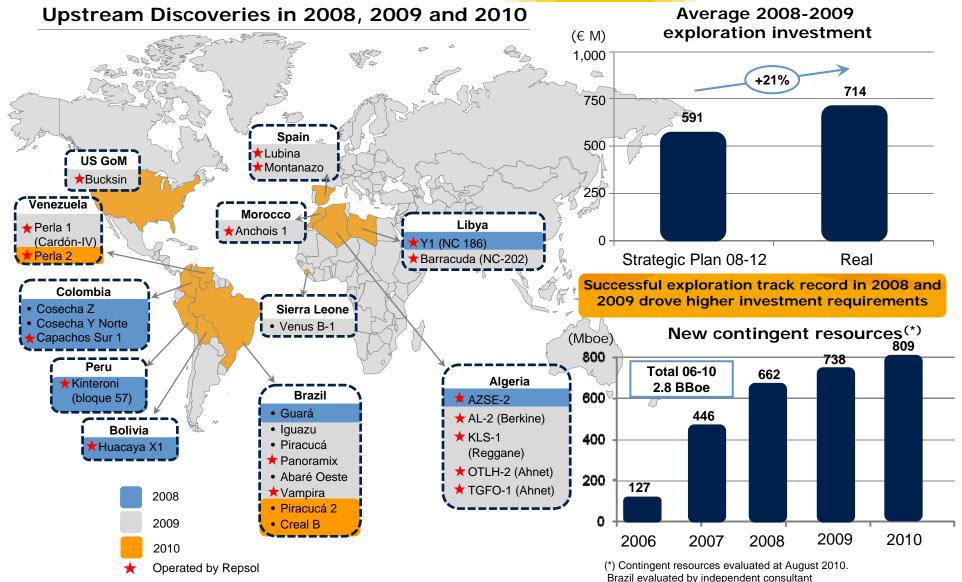






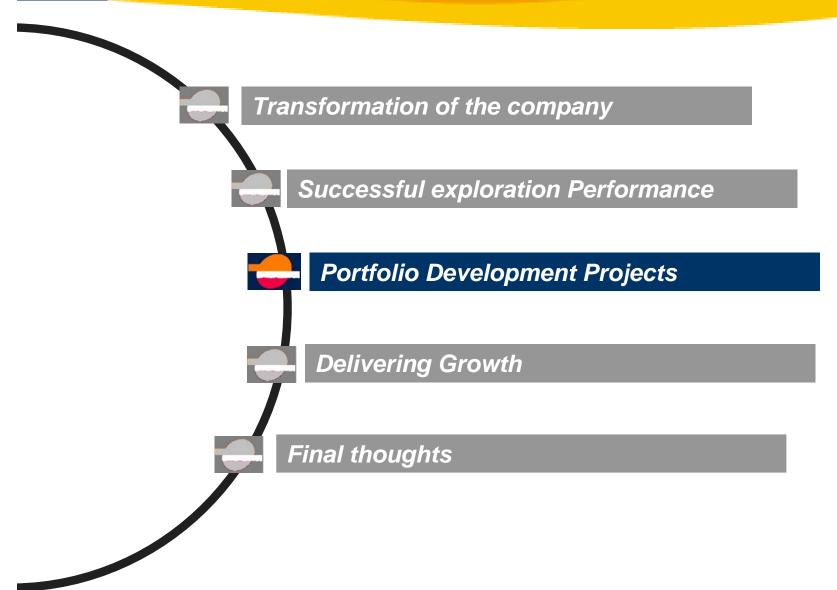
Very successful exploration performance to deliver future growth













Strong pipeline of Upstream and LNG projects















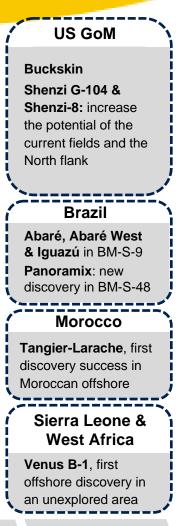




Carioca (Brazil)

Carabobo (Venezuela)

FID Pending (2012) Production: 400 kboe/d



2009

2010

2012

2013

2014

FID Pending (2011)

Production:

8 Mm³/d in 2014

2015

(2011)

Production:

25 kboe/d

beyond

Liquids

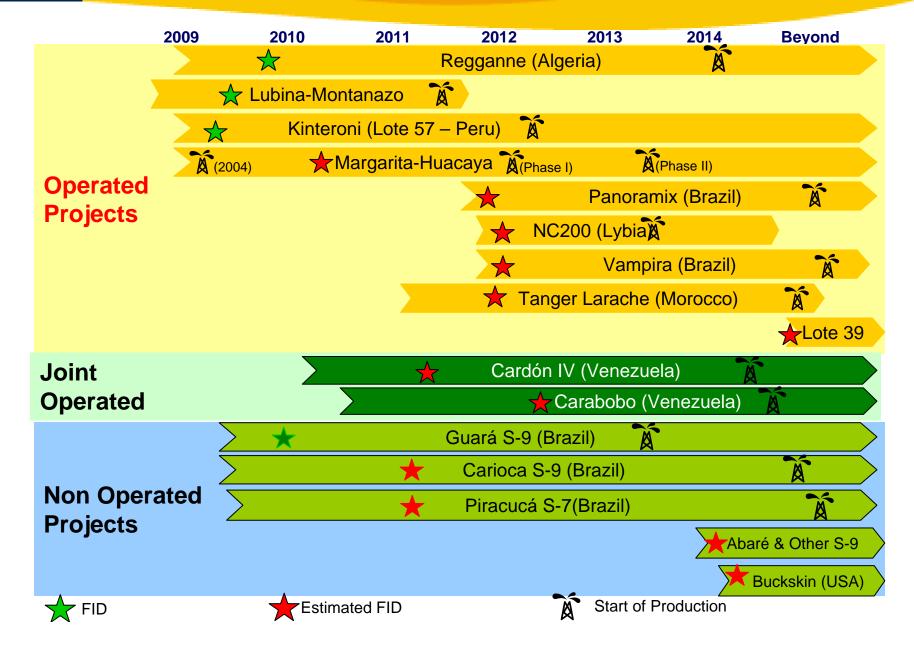






Strong pipeline of Upstream and LNG projects and associated Investments

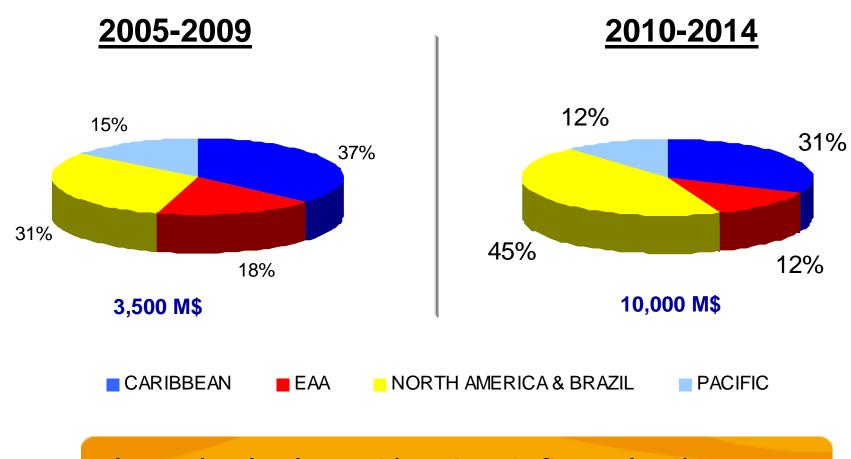






Growth in Development Investments





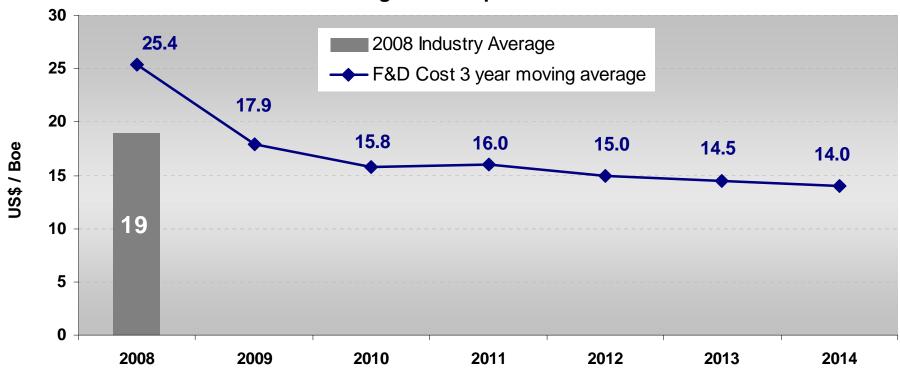
Increasing development investment after exploration success 15% of Internal Rate of Return requested



Improvement in Finding and Development costs



Finding & Development Cost



3 year moving average is calculated considering the given year + previous + subsequent









Developing new growth areas via exploration



Our focus in exploration activity...

Over US\$ 700 M of annual investment in exploration in 2010-2014 . 60% of exploration investment in core areas.

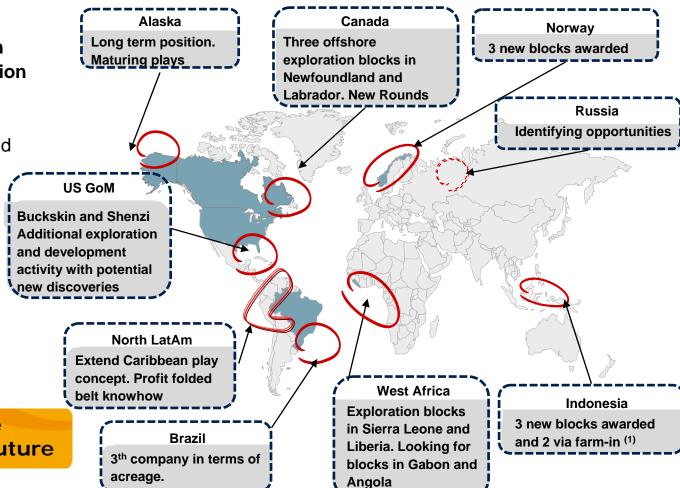
Various recent discoveries and valuable exploratory domain support high future growth potential

Rigorous conditions for investment

- Profitability
- Portfolio fit

Assuring acreage replacement for the future

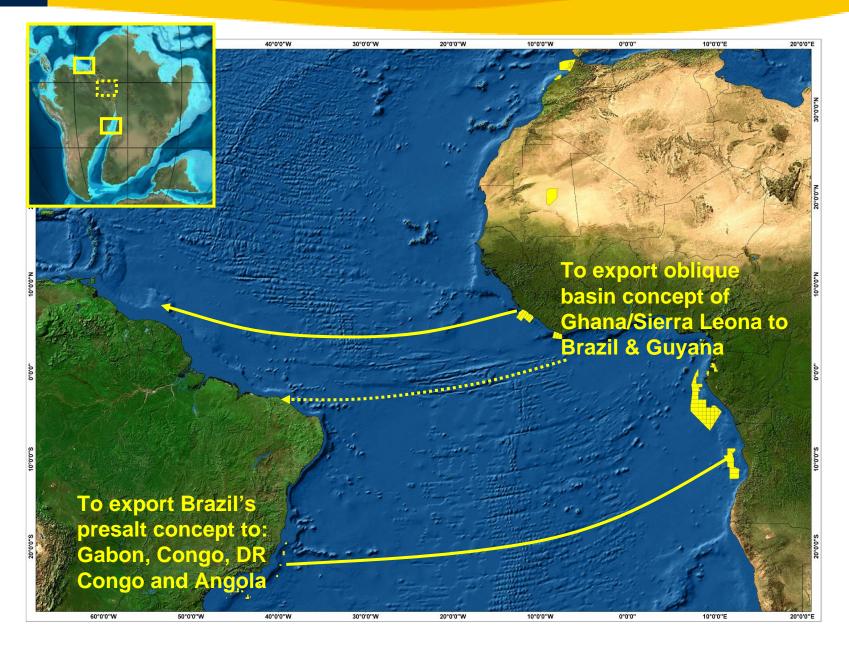
... will continue yielding new growth platforms





To capitalize geological models in both sides of the Atlantic Margin



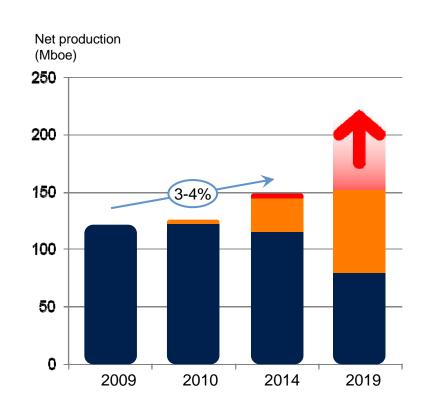


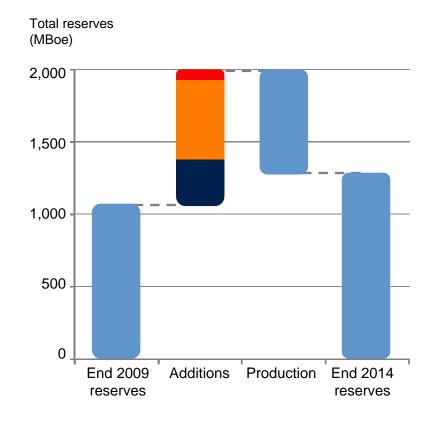




Production growth 3-4% p.a. to 2014 and higher to 2019

Proved reserve replacement ratio greater than 110%



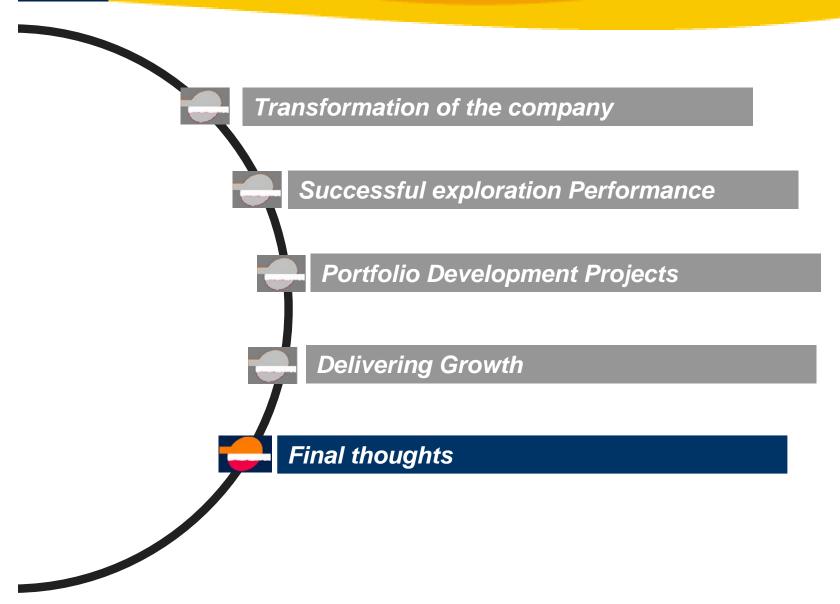


Note: All figures exclude Argentina

Exploration & Contingent ResourcesKey growth projectsCurrently Producing Assets









Upstream Diversification Strategy: Core areas



Traditional
Core areas
... difficulties to
continue growth



New Core areas ... opportunities



Platform to future growth...

North Africa

Limited acreage available and limited profitability due to new current contracts

North LatAm

Venezuela, Ecuador, Bolivia; **Trinidad:** low potential available; **Colombia:** new opportunities; **Cuba, Guyana y Suriname:** evaluating its potential. Good strategic position in case of success.

Brazil

3th company in terms of acreage. Strategic position in high potential plays "Pre-Salt". Contingent resources: Carioca-Guará-Piracucá-Panoramix-Abare-Iguaçu-Vampira.

US Gulf of Mexico

Exploratory campaign in 2011. Buckskin discovery. Active market with Leases and Farm-in opportunities.

Gas in Peru, Bolivia and Brazil

West Africa

Several blocks in interesting areas (Sierra Leone, Liberia, Equatorial Guinea) Looking for opportunities in Gabon and Angola

Canada and Norway

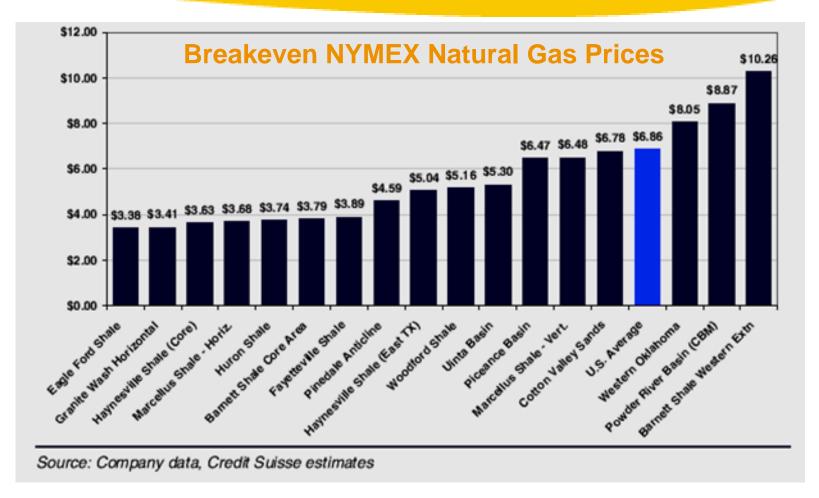
3 blocks awarded in Newfoundland and Labrador Canada Offshore Area. 3 new blocks awarded in Norway.

Indonesia and others (Russia)



US Shale Gas Considerations (1)





• The lowest breakevens for shale gas are close to the current market conditions.

These are hard economics for a buyer, as it is difficult to justify any premium over the value of the assets.



US Shale Gas Considerations (2)



- High premium values commanded in 2008/2009 led to sellers with unrealistic expectations for 2010.
- The new Gas Shale plays have little or no production history, so it is very hard to extrapolate the results of just a handful of wells into a 40+ years project.
- Repsol has been participating in all the opportunities available to complement our current strategy for Natural gas in the US and our marketing activities from Canaport. Acreage premiums have exceeded Repsol's threshold.



Delivering on our commitments and developing the next wave of growth



Value creation of the businesses

Accomplishing the transformation of Repsol Upstream into the Group's growth engine

- Deliver key growth development projects
 - Production growth of 3-4% p.a. to 2014 and higher to 2019
 - Around 90% of production increase to 2014 based on projects already in development
- Leveraging very successful exploration activity
 - Presence in some of the most attractive upstream areas worldwide: Brazil and GoM
- Reserve replacement ratio for the period above 110%



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