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EIG Energy and Infrastructure Group

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2010 IPAA Private Capital for Energy Conference
February 25, 2010

Houston, Texas

TCW Energy & Infrastructure Group ("EIG")

- **Among the leading institutional providers of capital to the energy sector globally**
  - Singular focus on energy and energy-related infrastructure
  - Broad offering of capital to industry (senior debt through equity)
  - Total capital solution providers
- **Global investment platform**
  - Global investment focus (invested in 32 countries; 6 continents)
  - 36 investment professionals
  - Operate from Houston, New York, Los Angeles, Washington D.C., London and Sydney
  - Team recently transitioned to joint venture relationship with TCW
- **28-year track record in energy, E&P Specialists**
  - 14 funds, 250+ portfolio investments
  - 4 full time Petroleum Engineers
  - Raising our 15th fund
- **Active Investor**
  - Invested over $10 billion in energy globally since inception
  - Over $6.5 Billion since 2001
  - Over $3.3 Billion invested in 2008 – 2009

A track record hard to match

Funds that target all portions of the balance sheet

(as of December 31, 2009)	Committed Capital	Initial Closing
1. Debt & Royalty Fund I[4]	$100,000,000	1982
2. Debt & Royalty Fund II [4]	293,000,000	1986
3. Cogeneration & Infrastructure Fund [5]	1,147,000,000	1987
4. Oil & Gas Equity Fund [4]	78,000,000	1988
5. Debt & Royalty Fund III [4]	208,000,000	1989
6. Debt & Royalty Fund IV [4]	308,000,000	1993
7. Debt & Royalty Fund V [4]	600,000,000	1994
8. Debt & Royalty Fund VI [4]	278,000,000	1997
9. Global Project Fund [4,6]	500,000,000	2001
10. Energy Fund X [5,7]	734,000,000	2003
11. Global Project Fund II [6]	700,000,000	2004
12. Global Project Fund III [6]	1,534,000,000	2005
13. European Clean Energy Fund [5]	507,000,000	2006
14. Energy Fund XIV [5,8]	2,569,123,000	2006
TOTAL	$9,556,123,000	

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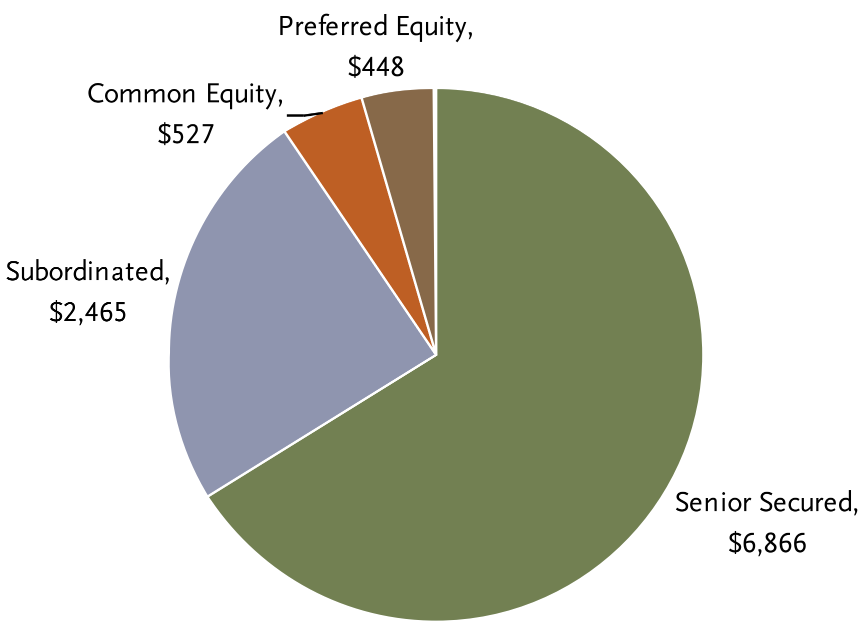
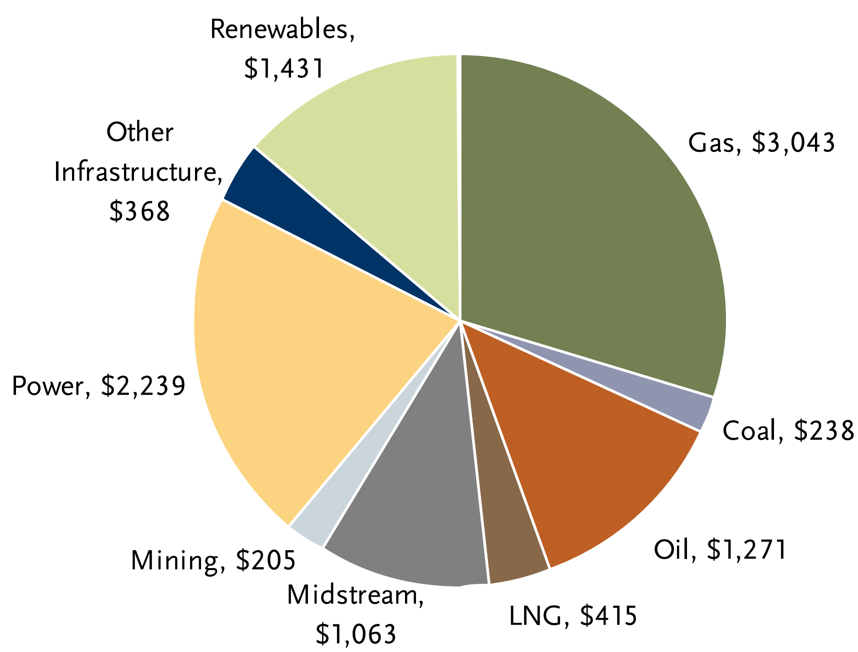
100% Energy; > 50% E&P

Nearly $10 Billion Invested in Energy Since 1982

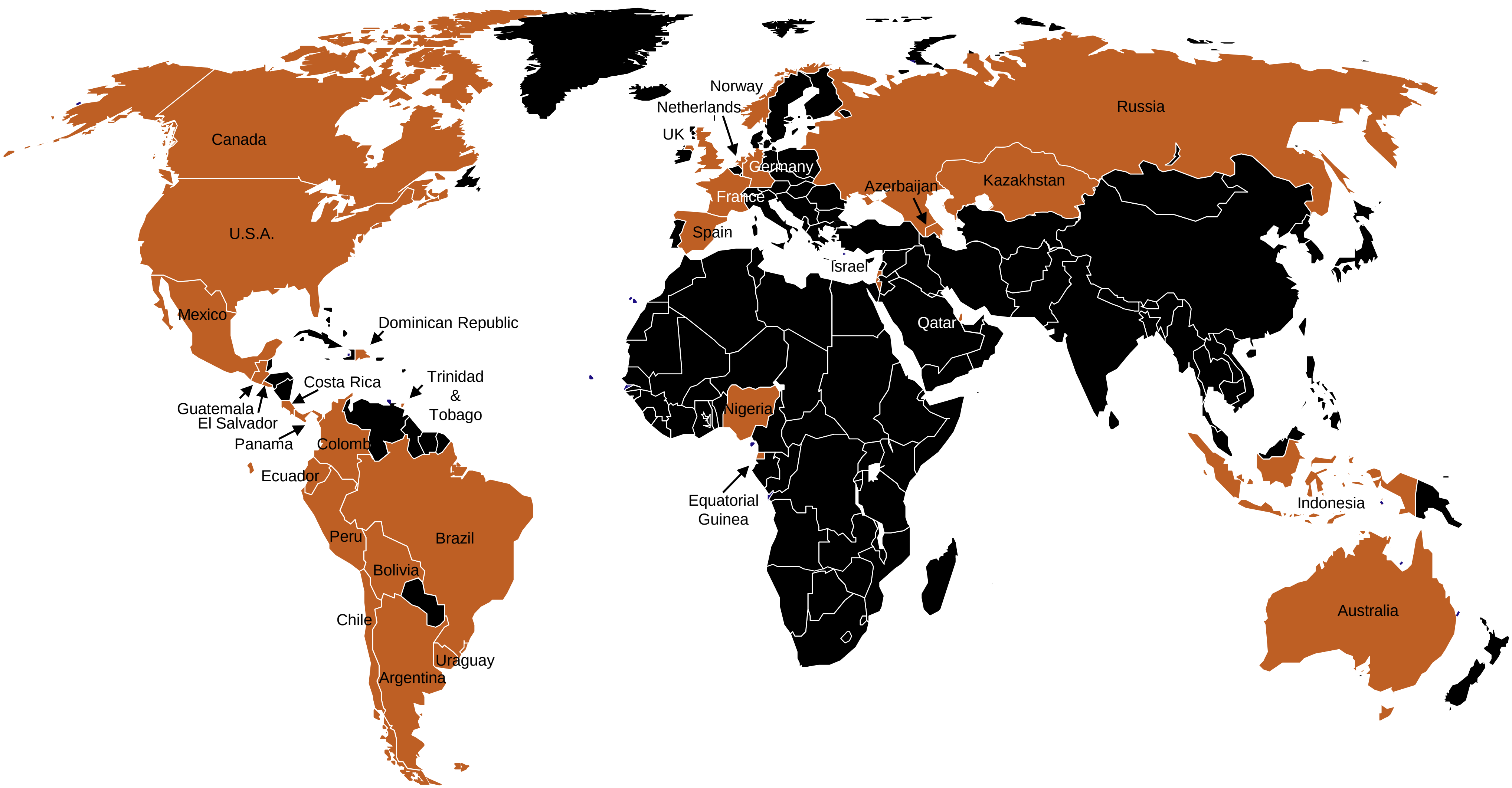
Ranking Diversity



Sector Diversity



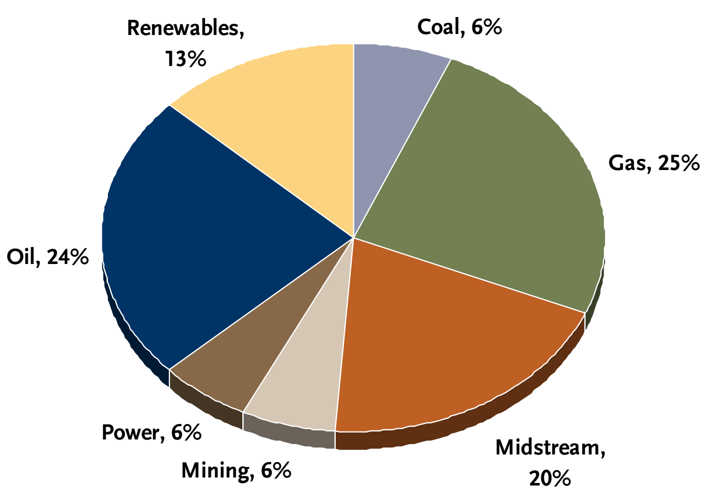
Invested in 32 Countries



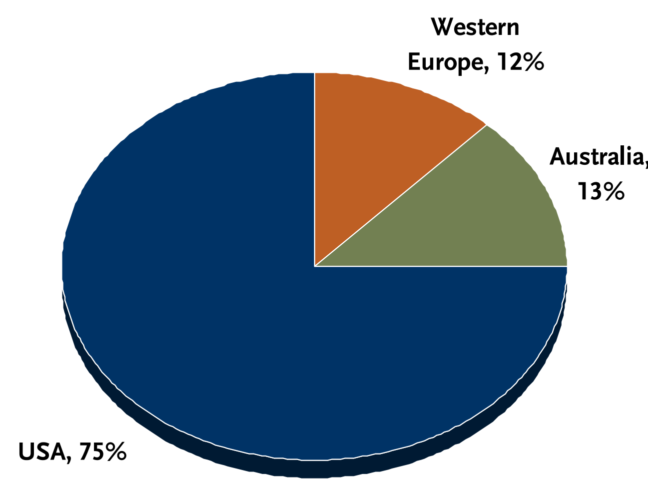
What have we been doing lately?

- Latest Fund (Energy XIV) is invested ~50% in Upstream and 20% in Midstream
- 25% outside of US

Fund XIV Sector Diversity



Fund XIV Geographic Diversity



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Energy companies and assets and related infrastructure

- Our roots are firmly in the upstream E&P space, but we play anywhere in the energy space

Upstream | Infrastructure | Midstream | Gas to Liquids | Transportation | Gas to Electrons | Renewables

Reserve-based Development
Production Payments
Forward Oil Sales

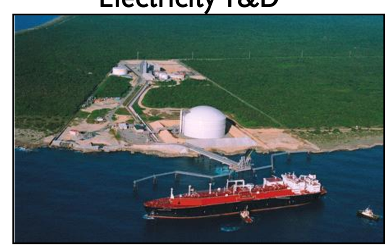
Production Platforms
Drill Ships
FPSOs
Drilling Rigs

Pipeline
Gathering Systems
Processing Facilities
Gas Storage
Bunkering

LNG
Synfuels
Processed Gas
(methanol, fertilizer, DME)

LNG Tankers
Specialty Tankers
VLCC Vessels

LNG Regasification Terminals
Gas Sales, Pipelines,
Gas-Fired Power Plants,
Electricity T&D



Wind
Solar
Biofuels
Geothermal

Institutional Investors and International E&P

- **From 2003 to 2007, institutional investors flocked to E&P private equity**
  - Sector specific E&P PE invested mostly or exclusively in US
  - Non sector specific funds also allocated heavily to US E&P
  - International E&P left mainly to generic PE or public exchanges
  - Resulted in US assets being bid up and many weak management teams being funded
- **Institutions reassessing their investments in the sector**
  - Does E&P PE generates "alpha" or simply expensive "beta"
  - Just a commodity play?
  - Less appetite for illiquid investments
  - Radically paring down GPs
  - Lots of interest in "other" energy - Infrastructure and Renewables e.g.
- **Nervousness about North American Gas**
  - Not sure if shale gas is a game changer or not
  - Bearish sentiment should help attract capital to non-US opportunities
- **Oil relatively more attractive**
  - Many "Peak Oil" theorists remain
  - Denominated in US Dollars
  - Know proven reserve are expensive to produce or in bad zip codes

Institutional Investors and International E&P

- **International E&P often perceived to be the riskiest part of a risky industry**
  - Best technical opportunities often in bad zip codes
  - Resource nationalism
  - Currency risk
  - Political risk
  - Less well bore diversity, higher well costs
  - Less infrastructure, thinner physical commodity markets
  - Illiquid

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Resource Nationalism

- International Oil Companies ("IOCs") have full access to only ~7% of the world's oil reserves
- National Oil Companies ("NOCs") operate as an extension of the government (e.g. Saudi Aramco, Pemex, PDVSA), or as autonomous entities that concurrently support government objectives (e.g. Petrobras, Statoil)
  – Activities of NOCs are frequently inefficient and/or not market-oriented
- NOCs produce the majority of the world's oil and hold most of the world's proven reserves
- IOCs are increasingly relegated to exploring in high-risk areas in order to secure reserves
- IOCs have until recently focused on leveraging their technical, organizational, and financial capabilities on low risk projects
  – Exxon's investment activity provides an example
- Iraq auction of development rights in Dec 2009 highlighted differences between IOCs, NOCs
- Credit crunch has improved the opportunities available to IOCs

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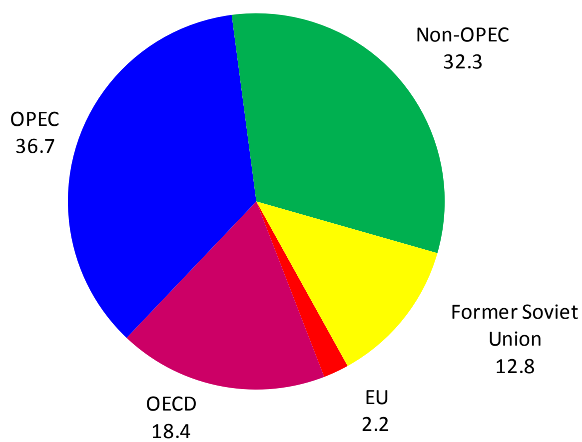
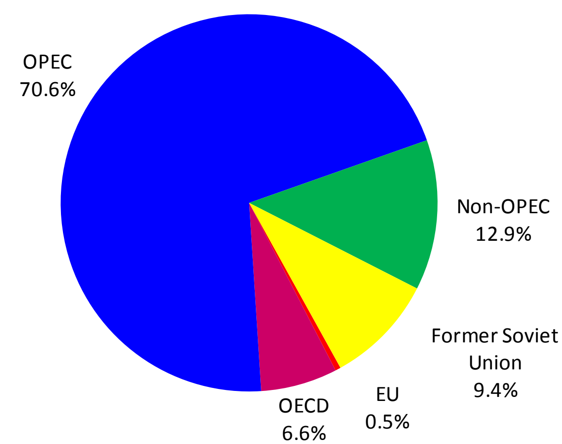
World Oil Production, 2008
in million bpd



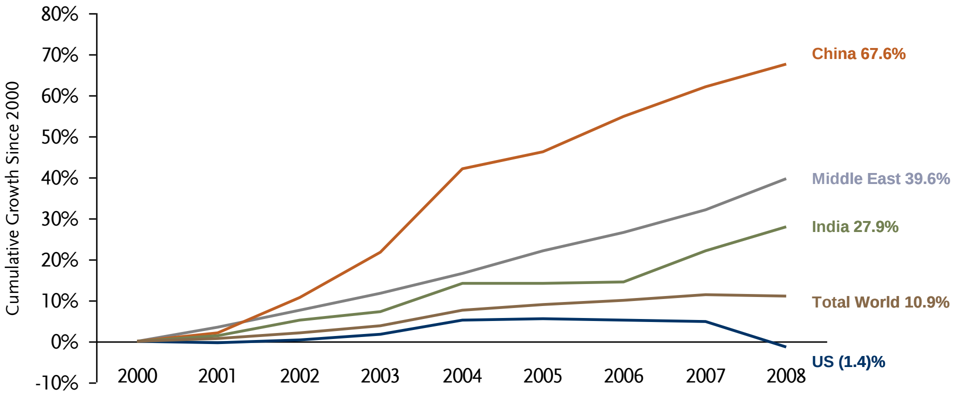
World Proved Oil Reserves, 2008

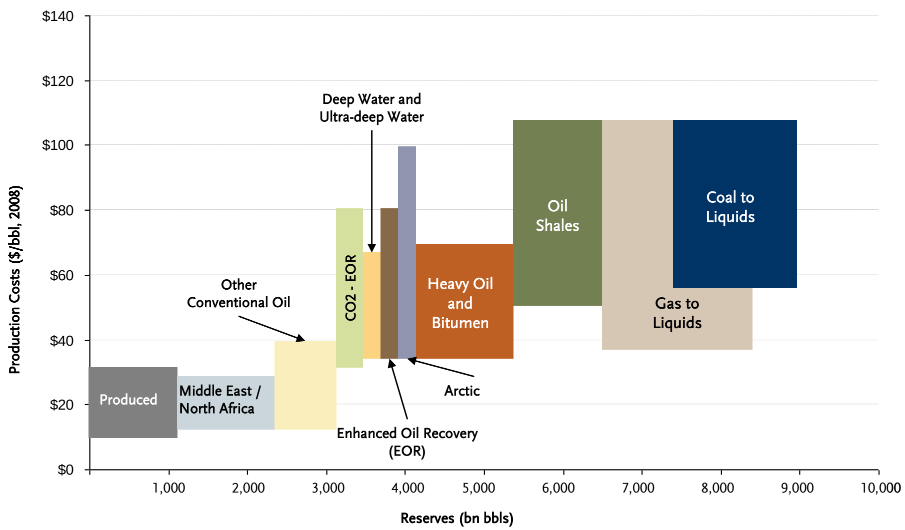


Source: BP Statistical Review - 2009

Oil markets – Investment of 5.9 trillion to 2030

Oil Consumption





– **Demand:**

- Global oil consumption is ~84million barrels per day, with OECD at 54% and US 22% of total
- Strong linkage to GDP growth
- Rapid urbanization and industrialization in Asia. China has ~27 vehicles per 1000 people, US has 780. Vehicle ownership strongly linked to personal income
- Demand side response to price rise and carbon will drive fuel efficiency gains

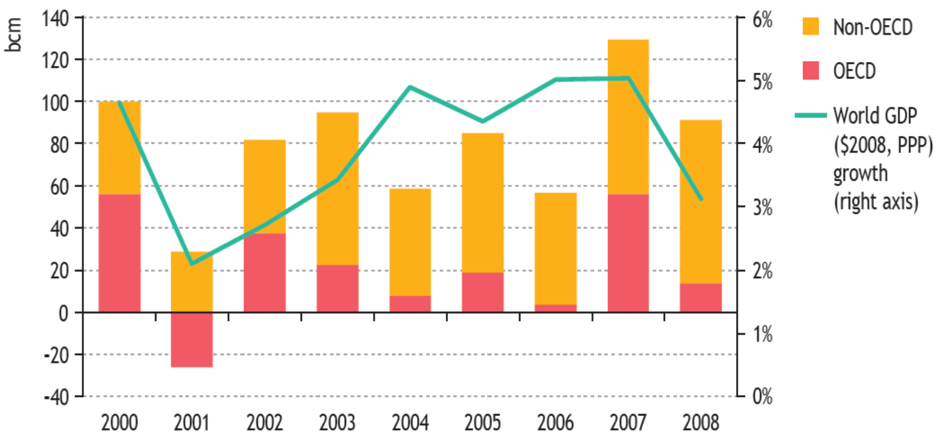
– **Supply:**

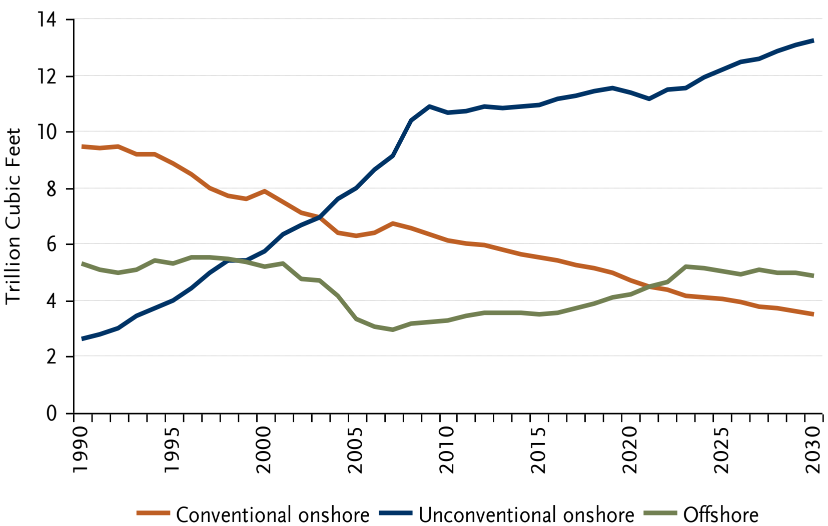
- Cheap oil is hard to find. Of ~70,000 oil fields globally, 20 super giant fields have produced 25% of total supply. 16 of those, which have been in production for decades, are significantly past their peak.
- 2009 saw reserve replacement fall below production, at 88%. Finding and development costs soared 66% to $25.50/bbl
- Marginal production increasingly coming from deep water or unconventional sources (eg oil sands)

Source: BP Statistical Review - 2009

Gas markets – investment of $220 billion per annum required

Change in world primary gas demand by region





– **Demand:**

- Global consumption is ~3 trillion cubic metres. US, W. Europe, Russia and M. East account for ~64% of total.
- Driven by regional market dynamics and strong linkage to GDP growth (industrial production and household incomes) and price (inter-fuel competition and weather)
- IEA forecasts demand to 2015 to grow at 2.5%pa. Over 45% of demand will be from gas fired generation and 1/3rd of demand growth is in Asia
- Geographical mis-match between load centres and resource endowment

– **Supply:**

- Over half of global resources located in Russia, Qatar and Iran. Global resource able to meet demand at current levels for over 130 years, excluding unconventional sources
- Unconventional proven reserves now account for 4% of reserve base. Technology driven boom in resource base
- Inter-regional trade (LNG) forecast to grow faster than demand, however capacity utilisation of liquefaction facilities to decline. Driven by lag in investment cycle and rise of unconventional supplies.
- Around 200bcm of LNG capacity required to 2030 and currently Australia alone has 100bcm of projects planned.

Source: IEA World Energy Outlook 2009, EIG

Non-US Equity Investments in E&P

- **We have been an active equity investor in non-US E&P since the early 1990s**
  - Equatorial Guinea
  - UK North Sea
  - Australia (offshore and CSM)
  - Latin America (Peru / Bolivia / Brazil / Argentina)
  - Canada (Conventional / CBM / Tar Sands)
- **We are selective in what non-US equity investments we'll make, but we will play for the right opportunity**
  - Growth capital as opposed to start up capital
  - Don't sell hunting licenses
  - Existing assets / development like risk
  - Strong management team with demonstrated track record
  - Local partner preferred
  - Clear plan of execution and exit
  - Clearly mitigated political risk, currency risk
  - International resource plays
  - Small listed companies

Thematic Investments and Recent Examples

Opportunity	Current Dynamic	EIG Portfolio/Pipeline Examples*
Energy-related Infrastructure	• Pipelines, gathering systems, compression, processing and rigs for energy companies looking for growth capital or to recycle capital currently tied-up on their balance sheet	epicenergy; PIÑON SandRidge Energy
Renewable Energy	• Wind, geothermal, solar and biofuels primarily in the US and Europe in response to the implementation of carbon regimes	Invenergy; ABENGOA SOLAR; centrica; NGP Nevada Geothermal Power
Recapitalization of Mature Assets	• Operating assets with significant existing cash flow as a source of liquidity for large energy companies in a credit constrained environment	CHENIERE; PIÑON SandRidge Energy; LARCHMONT; ABENGOA SOLAR
Oil versus Gas	• Onshore and offshore primary and tertiary oil recovery plays recognizing the relative value of oil versus gas on a BTU equivalent basis in the current market	Anadarko; Nations Petroleum; Coogee Resources
China/Asia Energy Demands	• Enhanced activity in existing EIG Austral-Asian platform recognizing continuing resource nationalism and demand for energy and resources	Coogee Resources; epicenergy; Moly Mines Limited

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Unmatched Record in E&P

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