Energy-Redefined

How to Profit and Survive in Drilling

Gary Howorth

Founder

2009 Trends in the Offshore Drilling Rig Market IBC Global Conferences

29th September

Introduction – Points to be Covered

- Overview of the current drilling market
- Future views
  - What might the dynamics look like in the next 5 years?
  - What about carbon how will that affect the oil & gas industry and drilling in particular?
  - What will oil & gas prices do to the market?
  - What might technology and cost saving do to the business?
- Lessons from downturns from both within and outside of the industry
  - What can we learn from downturns and apply now?
- What potential business models does this suggest?
  - Should you merge, innovate, cost reduce or something else?
- So what does it mean? - the way forward for the drilling industry

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The Order of Play

- So how do your customers the oil companies view this?
- What about GDP and other prices e.g. Steel prices
- So what does that mean for oil prices & the Offshore Drilling Industry
- Carbon & Carbon Capture & Storage (CCS)
- Technology
- So what have others done in a downturn/recession – can we learn anything
- Options and Alternatives
- The Way Forward?
- Conclusions

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Industry Quotes

- ***Our analysis shows that given the recent cost climate present day commodity price levels simply do not allow the Majors to continue to grow the business and pay substantial shareholder returns, -*** Neil McMahon of Sanford C. Bernstein
- **While the drilling rig count, are down sharply from last year and continue to fall, the key question remains when we will get an upturn in Gas/Oil demand from recovering automobile and housing industries.. Once prices recover, then drilling should resume,**
- **The challenge for the oil service industry is to gauge the number of drilling rigs that will be needed once we enter the industry recovery phase.**
- **May need considerably fewer rigs to restore a relative balance between supply and demand that is needed to support reasonable pricing.**

Is this right?

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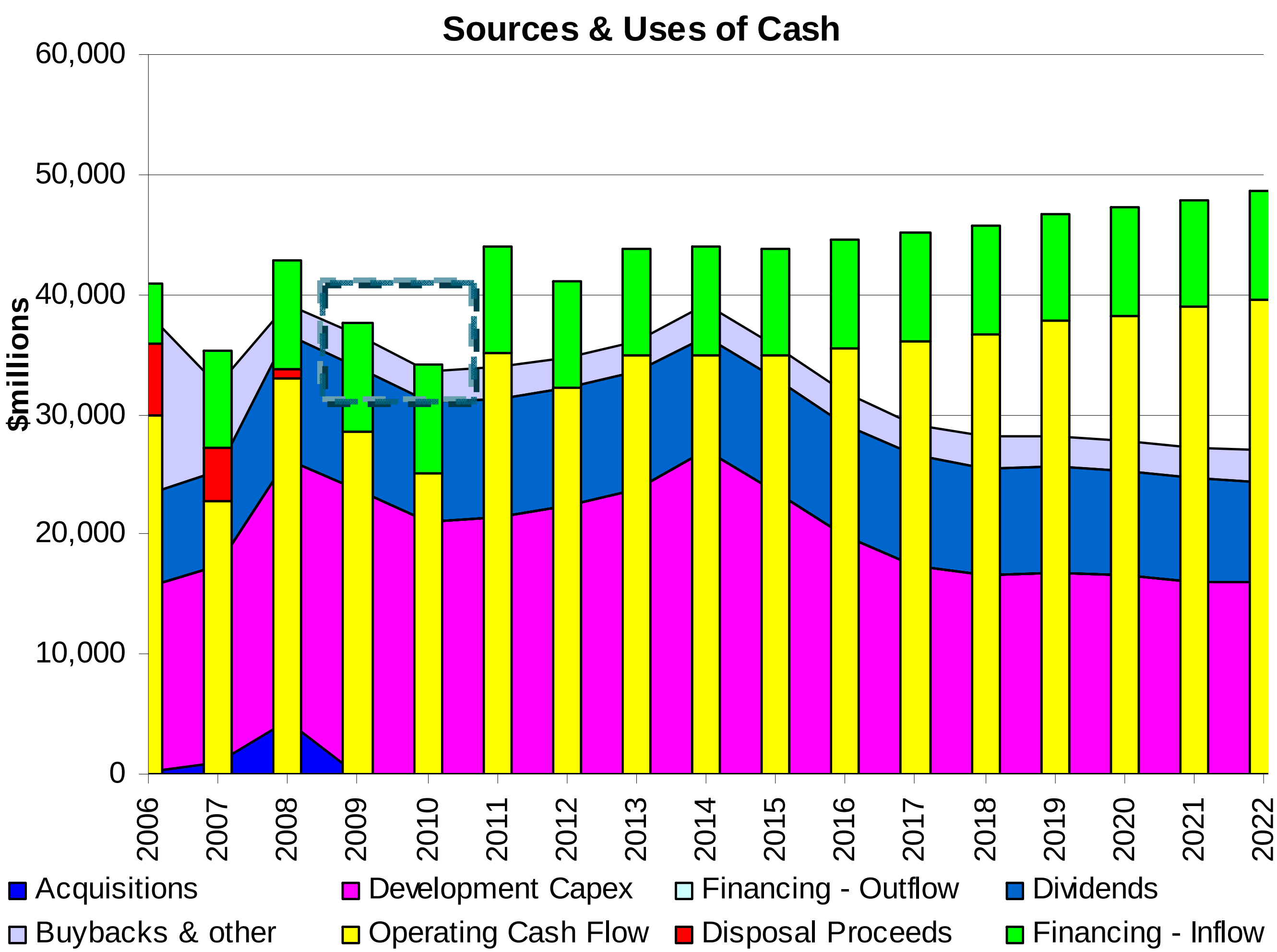
Oil Company Financials



$70/bbl and large budget cuts

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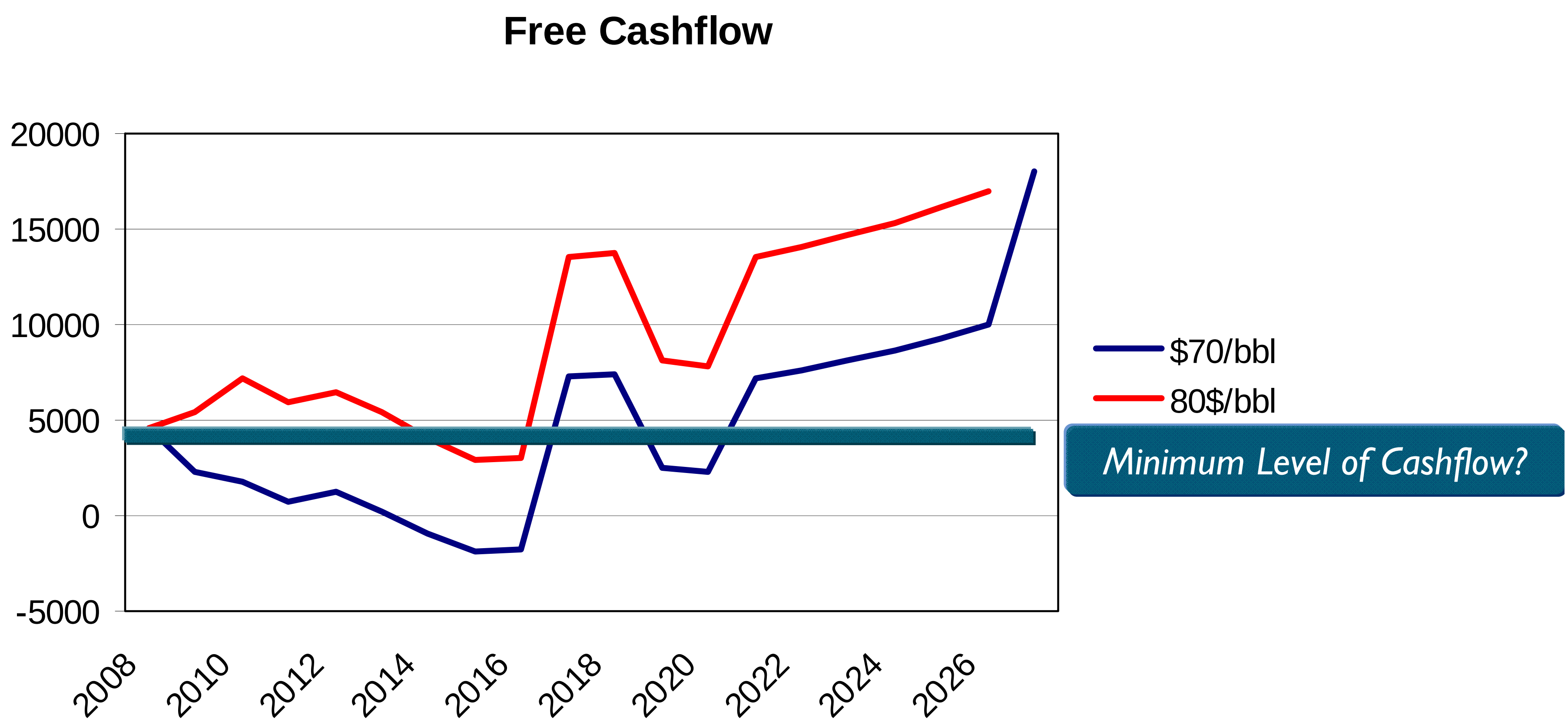
Oil Company Free Cash-flow: The Customers Pain



$12 Billion Dev CPX budget, $2 Billion Expro

Many Oil companies in Pain at 70-80$/bbl – Will affect drilling

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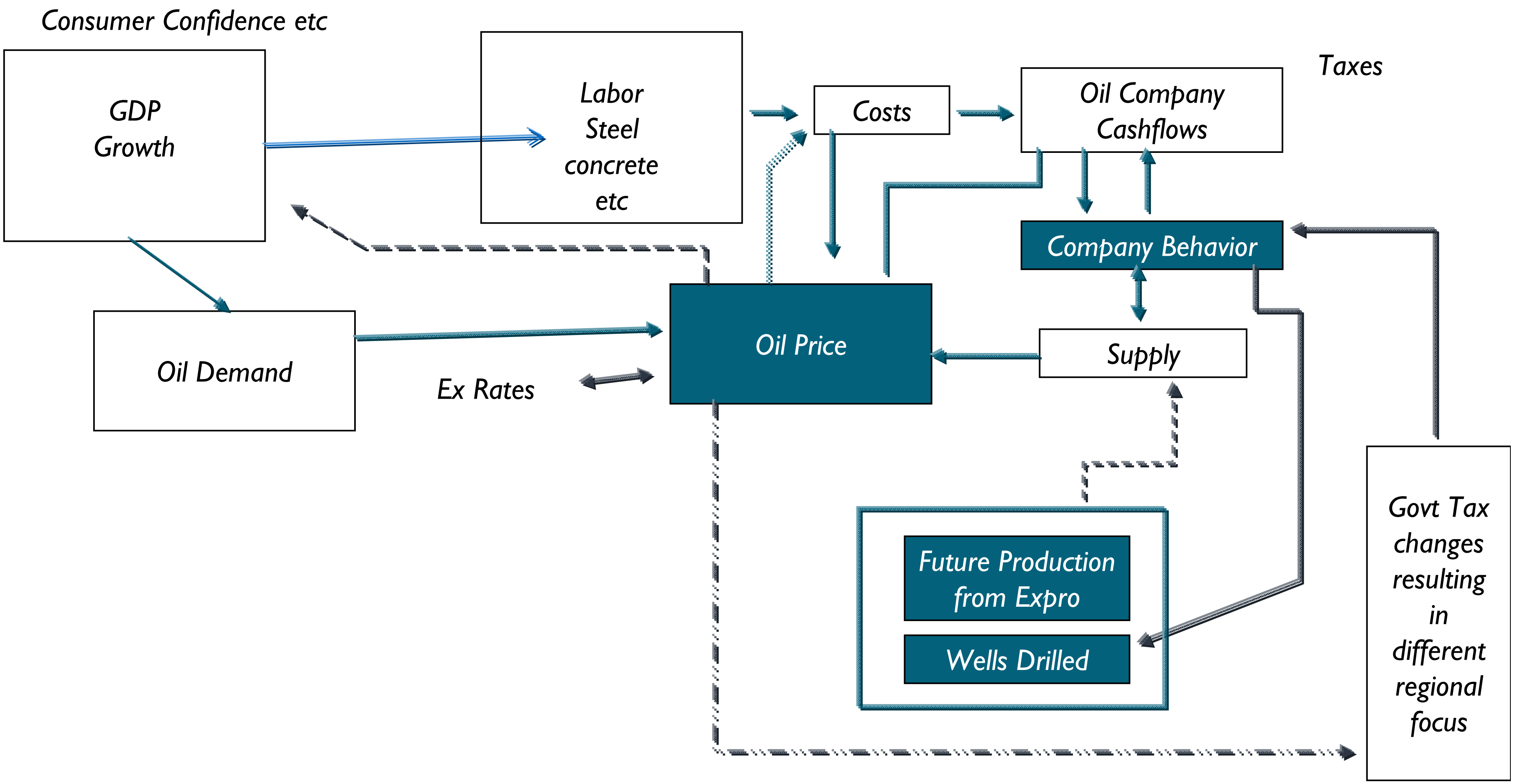
Complex Interactions forming Prices and impacting Drilling



So What About the USA

China Can no longer behave like China because the US intends to behave like china - FT

Greater exports and a smaller current account deficit – less dependence on foreign investors to bail out the financial sector - Larry Summers

Probably means impact on Japans , Germany's and China's exports (and current surpluses),
& Dollar Depreciation

Has an impact on the dollar oil price

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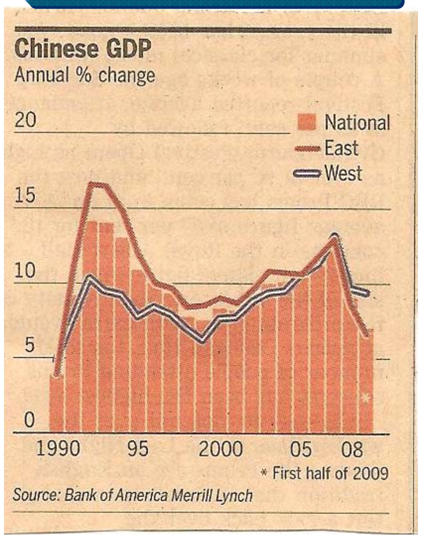
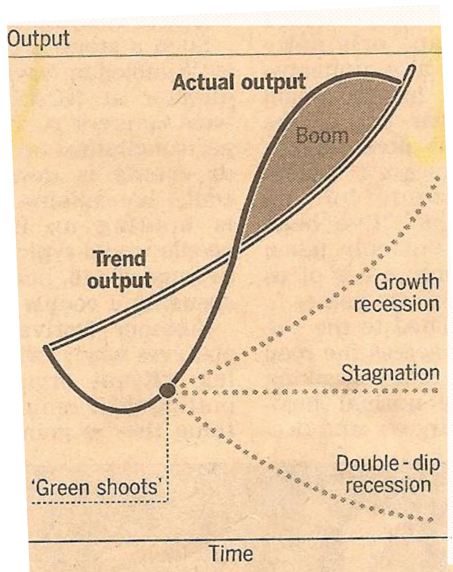
GDP Growth?

China



Consensus View

Historical



But where is it really going?

Source FT from various forecasts as credited

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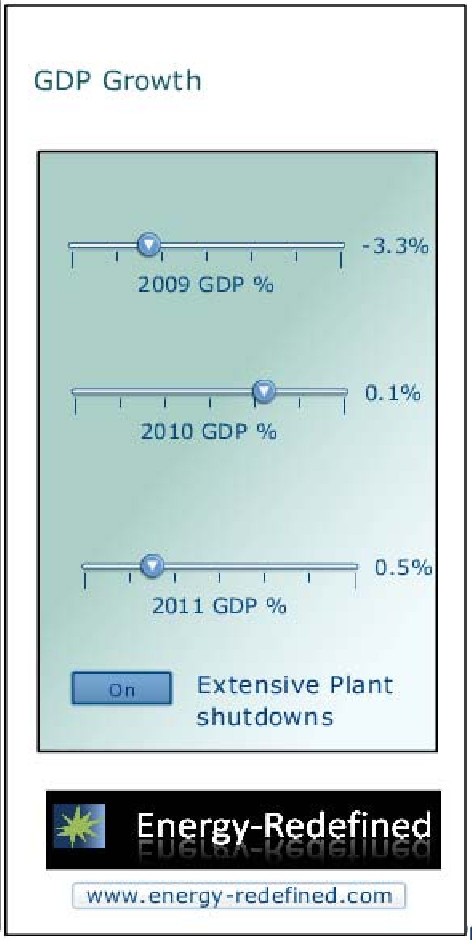
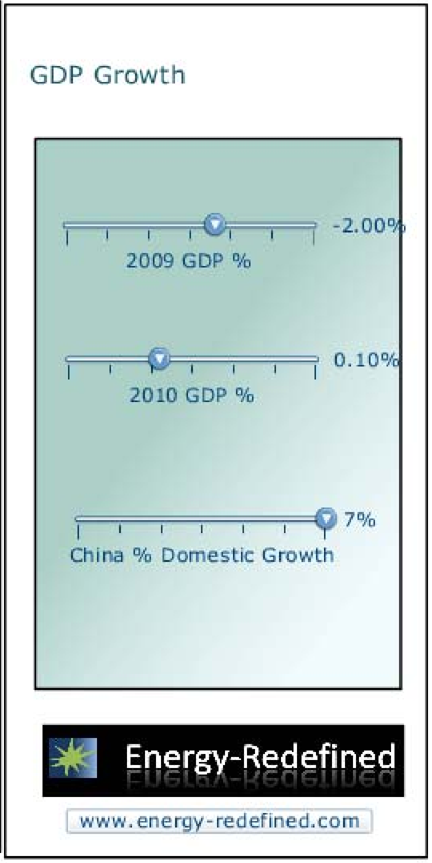
Saving Grace -Steel Prices?

- GDP growth has a great impact on steel prices as well as other input costs



How does China and US Assumptions Affect Oil Prices



The order in which oil prices occur matters
Cost levels and GDP assumptions are important

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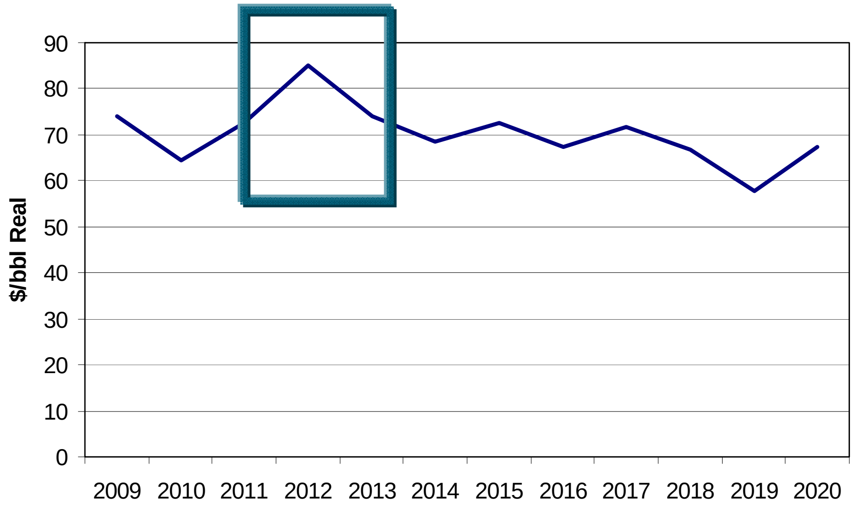
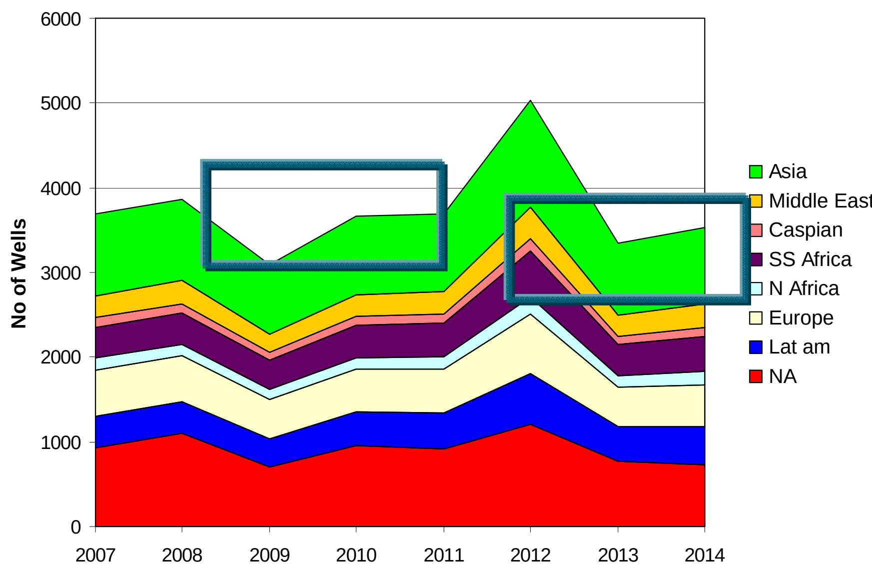
Oil Price and Well Forecast under a Slower Growth Assumption



Utilization



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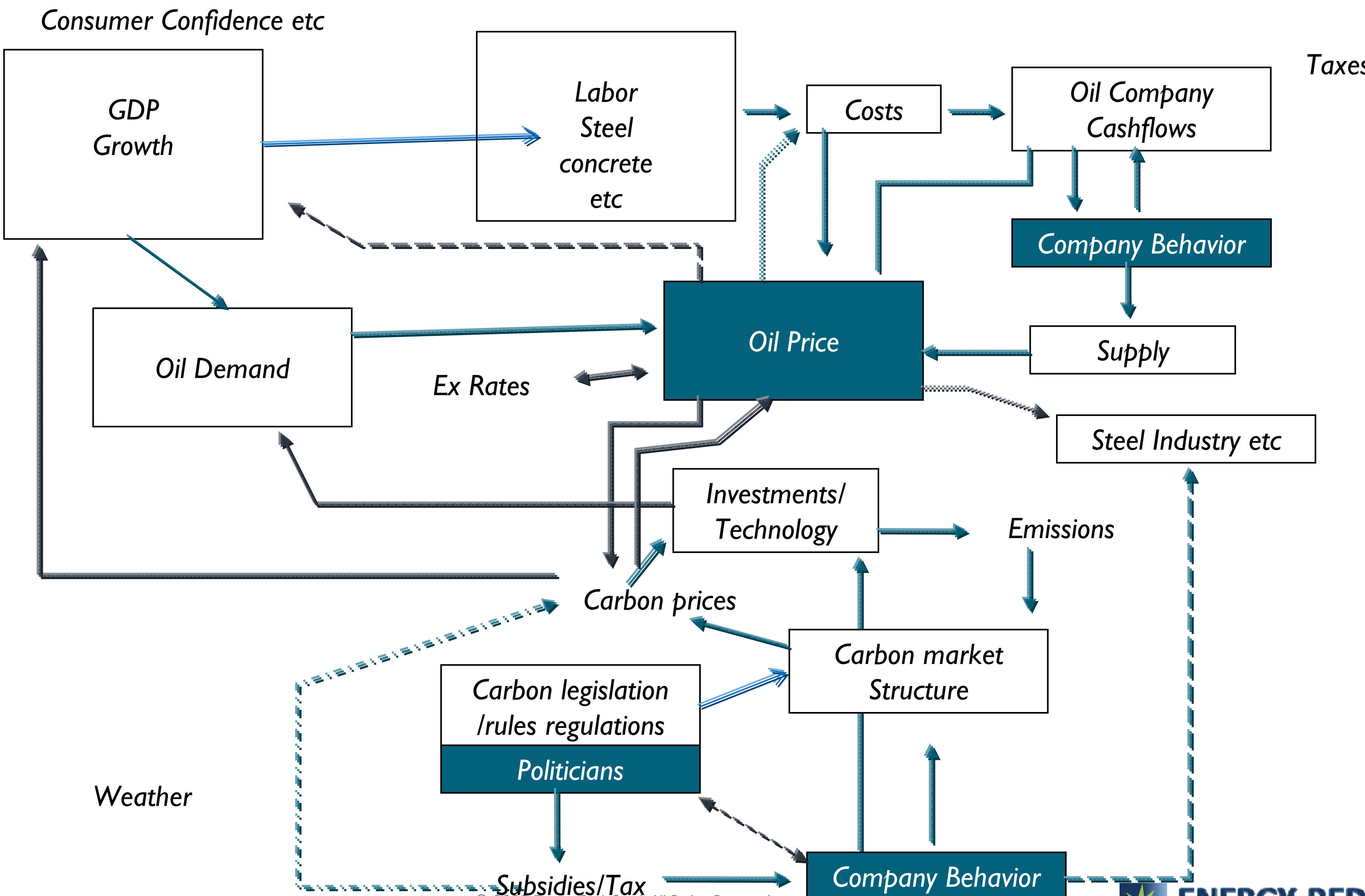
Complex Interactions forming prices and impacting Drilling – Now with Carbon



Carbon - $15/CO2e te

- Small impact – our models show an increase in oil price of 80 cents/bbl
- Typical oil company might gain $100 -400 million per year - not going to change drilling levels much
- Carbon prices likely to reduce GDP by ~ 0.15% - resulting in a oil price reduction of up to 7 $/bbl ie ~ 10%

- Higher oil prices of 100$/bbl could result in a reduction in demand through the use of alternative technologies and efficiency gains. This could further reduce oil prices by as much as <u>$20/bbl</u>

- Estimates by Energy-Redefined

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Carbon Storage

- Recent Study shows that Scotland has an extremely large CO_2 storage resource. This is overwhelmingly in offshore saline aquifers (deeply buried porous sandstones filled with salt water) together with a few specific depleted hydrocarbon fields.
- The resource can easily accommodate the industrial CO_2 emissions from Scotland (1/10 of the UK) for the next 200 years.
- There is very likely to be sufficient storage to allow import of CO_2 from NE England,
- Total potential CO_2 capacity in the range 4,600 to 46,000 million tonnes

But what does that mean for Drilling?

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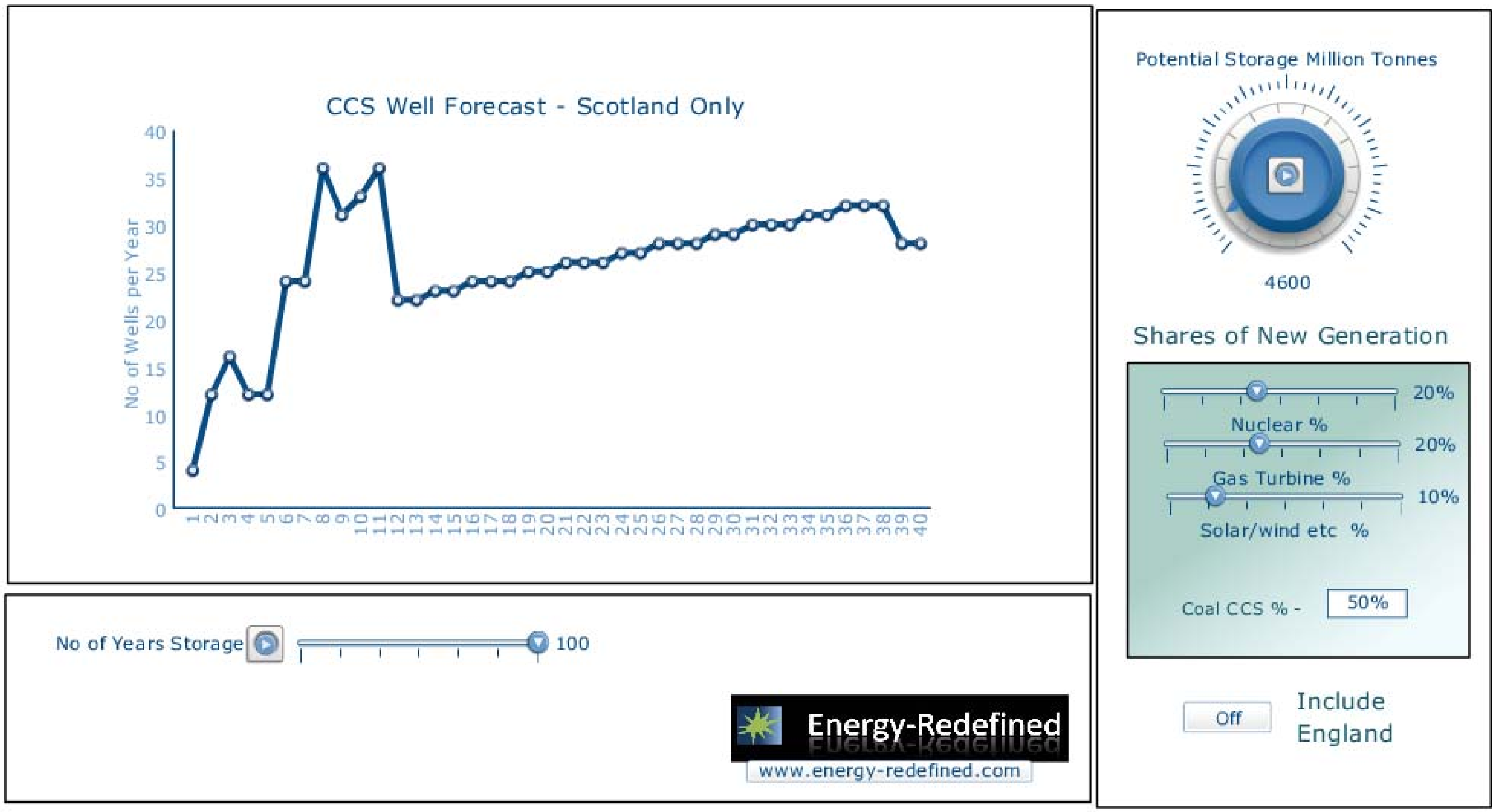
CCS Well Potential - UK



Estimate by Energy-Redefined - Assuming 4600 million tonnes of capacity

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US CCS Potential

- US market is 60-80 times bigger
- But mostly onshore
- But even with 20% offshore - 500 wells per year potential – a very different market !!!
- US has more storage than it needs from its own industrial output
- Not all Economic right now!!!!!

So this market could be 20% of the world offshore drilling market and maybe provide bigger margins?

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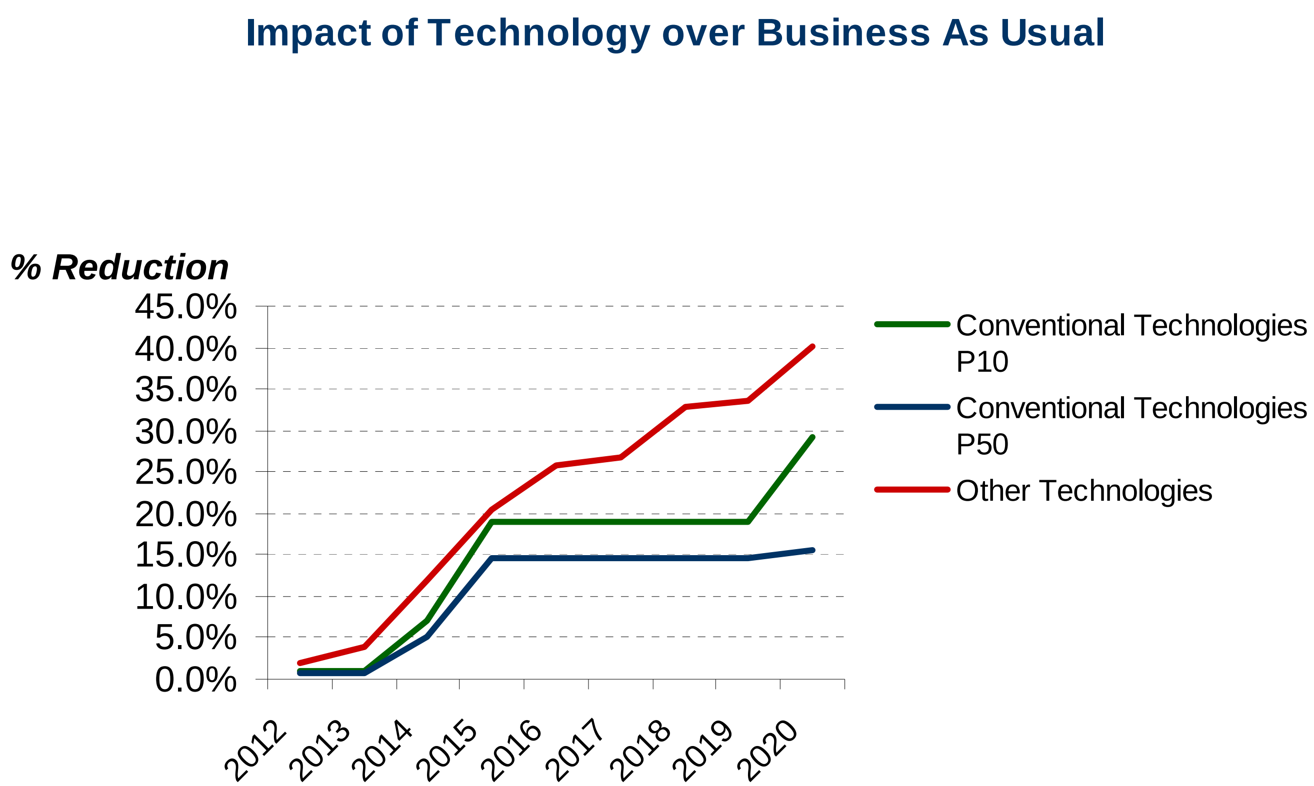
Impact of Technologies



- Estimates by Energy Redefined

Downturns are times when Smart People make Fortunes

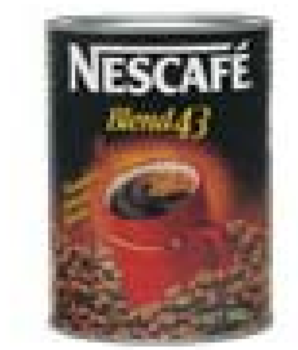
- Amoco Corp. fc
have moved up
- cquisitions in 19
the sector net worth. Cost savings probably generated some $3 b
- In 1999 the Drilling Companies Sedco and Transocean merged c
by cost Sa because of highe

Mergers & risk taking

- Frontline – ing the Iran Iraq wars in the 1980s when his tankers picked up oil at great risk and huge profits. He landed squarely in the sweet spot of the tanker cycle, with the largest fleet of ships. Was counter cyclical creating $1 billion

Recessions also cre npanies

- Bill Hewlett and Dave Packard founded a great company in 1939 from t ve
products – Created ~$60 billion
- Chester Carlson patented Dry copying process to create Xerox in the 1
- created ~$
- ada pe to
value s
technique



Growth Opportunities Increase during Economic Downturns

- It is counter-intuitive but research confirms that economic downturns are generally the best times to
  - implement growth initiatives
  - *create shareholder value*.
  - that the most effective business strategy during boom times is to divest assets
  - or implement similar retrenchment activities.
  - The Great Depression created more millionaires that any other period of time in US history!
- Unfortunately, and perhaps not surprising, most companies do the exact opposite!

But How?

- Key themes emerge:
  - Efficiencies
  - Deals – buy low sell high
  - Innovation
  - Customer (government) focus
  - Risk taking and opportunity seeking – counter cyclical
  - “War Chests”

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So What does it Mean?

- **Rigs under-utilized for many years in slow growth scenarios**
- **How do we find alternative uses for them**
  - **CCS?**
- **Solutions**

- **Understand your customers' business.**
  - You must understand your business almost as well as they do
  - The more you help them, the more you help yourself
- **Be creative and Innovative**
  - There are plenty of opportunities for us to challenge the way we drill wells
  - Look for profitable alternatives.

Opportunities / Alternatives/ Trends

- CO_2 Storage
- Production optimization – integration of drilling
- Rig optimization - logistics
- Convert the rigs to provide some other function
  - GTL
  - Transportation
  - Accommodation
  - Production systems
- Cost cutting
- Seismic while drilling
- …….

Some suggestions

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Short Term Survival Options

Options	Internal	Acquisition	Alliance
Withdrawal	Liquidation	Divest Management buyout	Subcontract outsource
Consolidation	Decline or grow with market	Buyout & shutdown	JV/Partnering
Cost cutting	Costs/Layoffs/Stacking	?	Partnering?
Increased focus on key sector	Increase quality productivity	Buy Expert Co	xxxxx
Technology/Innovation	New Sector, New Technology, R & D	Buy key technologies or licence	xxxx

Short Term Survival Options

Trends

- Customer focus
- Innovation
- Alterantive Uses
- Prod opti
- CO2

Internal

- Liquidation
- Decline or grow with market
- Costs/Layoffs/Stacking
- Increase quality productivity
- New Sector, New Technology, R & D

Acquisition

- Divest Management buyout
- Buyout & shutdown
- ?
- Buy Expert Co
- Buy key technologies or license

Alliance

- Subcontract outsource
- xxxx
- Partnering?
- xxxx

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So what's the way Forward

- Key - look for alternatives that intersect trends
- Doesn't lie in the conventional approaches of acquiring or cost cutting
- New Sector approaches have probably have most promise but need funding

- Failing this
  - Profit management not cost cutting
  - Build a war chest for the next downturn

Conclusions

- Oil companies in Cash-flow pain – 80$/bbl + needed
- Oil prices greatly affected by assumptions on US and Chinese health
- Oil prices could remain low for many years under a slow growth scenario
- Carbon will not affect oil prices that much per say but will affect demand. At high oil prices this effect could be large.
- Utilization of rigs could remain low !!!
- Alternative options and uses required to improve profitability
- CCS Drilling could add some 15-20%to the drilling stock
- Key seems to be to have a war chest for future downturns and to “build alternative business lines”

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Thank You

gary.howorth@energy-redefined.com

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