



Forties - Grangemouth: the failure of a complex tightly coupled system

Posted by [Euan Mearns](#) on April 27, 2008 - 8:00pm in [The Oil Drum: Europe](#)

Topic: [Policy/Politics](#)

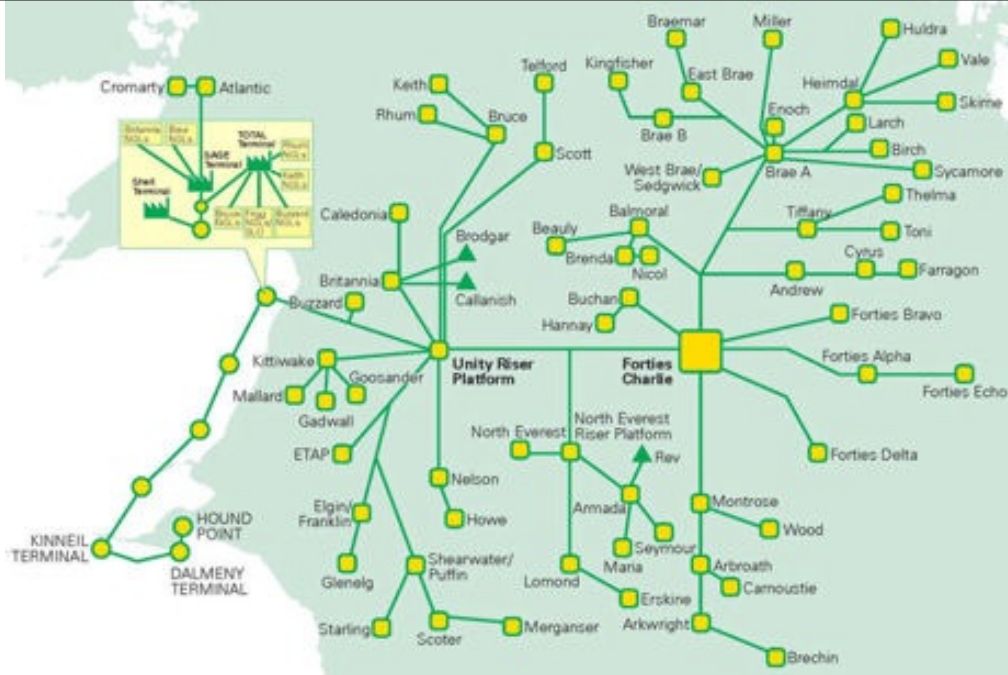
Tags: [alex salmond](#), [bp](#), [complex system failure](#), [forties pipeline](#), [gordon brown](#), [grangemouth](#), [ineos](#), [olduvai gorge](#), [pensions](#), [strike](#), [uk energy security](#) [list all tags]

The sequence of events (covered [here on The Oil Drum previously](#)) that led to the **Forties Pipeline** closure on 27 April 2008 began in 2005 when BP, currently the UK's largest company, sold Innovene, their Grangemouth refinery subsidiary to Ineos. **Ineos** is privately owned petrochemicals company that has grown from nothing since its formation in 1998, fueled by debt reported to be **€9 billion**.

BP, once 50% owned by the UK government, used to own and operate the Forties Field, the Forties Pipeline system and the Grangemouth oil refinery. This is a tightly coupled complex system where oil from the North Sea flows by pipeline to Kinneil terminal where it is either diverted to Grangemouth to be refined and then combusted by energy hungry consumers or it is diverted to Hound Point for export by tanker (see map below the fold). The failure of any vital part of this complex system may close the whole system down. This system is now fragmented and its failure has just happened.

Failure by BP to recognise the dependency of the Forties Pipeline upon vital services provided by Grangemouth, and to provide contingency back up for their loss, is the principal cause for over 40% of UK North Sea oil and gas production now being shutdown.

Incident prone BP are of course not the only stake holder to shoulder responsibility and below the fold I explore the responsibilities of the Grangemouth Workers, Ineos, The Banks, Government and The Media in contributing to this debacle.



Grangemouth oil refinery lies close to the Kinneil terminal and is an integral part of this massive oil and gas production and transportation system.

Ineos

Ineos have grown from nothing in 1998 to become the World's third largest chemicals company today. How was this achieved? Through innovation, research, engineering, creativity and hard work? No, it was achieved by buying assets no longer required by leading companies with borrowed money and..

- [Leveraging existing resources to expand sales](#)
- [Achievement of cost savings](#)

Why is it that world beating chemicals companies such as [BP](#), [BASF](#), [Dow Chemicals](#), [ICI](#) and [EVC](#) have chosen to sell their assets to Ineos rather than leverage sales and cut costs themselves? Publicly listed companies are of course answerable to their many shareholders which provides one check and balance in our system of industrial regulation. The objective of making money rightly lies at the heart of most companies - but not at any cost. Ineos is answerable principally to their billionaire owner, [Jim Ratcliffe](#). The safety net of broad public ownership has, in this case, gone.

At a time when refinery feed stock costs are escalating (oil and natural gas), energy costs are escalating, interest costs are rising, banks are deleveraging their risk and requiring higher security cover, it is relevant to enquire how resilient Ineos is? And is it in the national interest to place a lynchpin of UK oil and natural gas production (the power supply for the Forties Pipeline system) in the hands of a company such as this one?

Are Ineos to blame for not settling this dispute with the Grangemouth workforce? The honest answer is I don't know. If the company is making massive profits to line the pockets of one majority shareholder then the move to reduce worker's remuneration must be seen as feudal and inexcusable. If on the other hand Ineos are facing troubled waters and the move to revise workers pension rights is designed to protect the company then that would be a different situation altogether. Only time will tell.

BP

The dream that was BP, created by [Lord John Browne](#), has turned into a nightmare. The Thunderhorse platform nearly sank, Alaskan pipeline leaks, Texas Refinery explosion and now the closure of the Forties Pipeline system - when will the series of high profile incidents end?

BP seem to lack the management skills to run large complex projects reliably, *all the time*. When they sold the Grangemouth refinery to Ineos they must have known that they were also selling services vital to their highly profitable Forties Pipeline system and in so doing they were relinquishing control over this prime asset, vital to their own, their shareholders' and to the nation's best interests. One must presume therefore that the risk of losing the pipeline to an incident at Grangemouth was evaluated by BP management and was regarded as a risk worth taking.

I would argue that a large public company like BP should have identified this risk and set in place contingencies to mitigate it - such as retaining part ownership of the power plant or building a back up system.

Of course the cost of doing so may have been too high and running the risk of Grangemouth failure chosen as the better option. It will be interesting to see if third parties who pay handsomely to use the Forties Pipeline system take any action against BP for their losses. This is not in my opinion [Force Majeure](#) but force avoidable.

The Scottish Government

Energy policy is not a devolved power to the Scottish Parliament which must therefore be held largely blameless in the current dispute. By Friday, First Minister [Alex Salmond](#) was making the right noises about workers and management getting together but by this time they were all likely down the pub and this intervention was rather late.

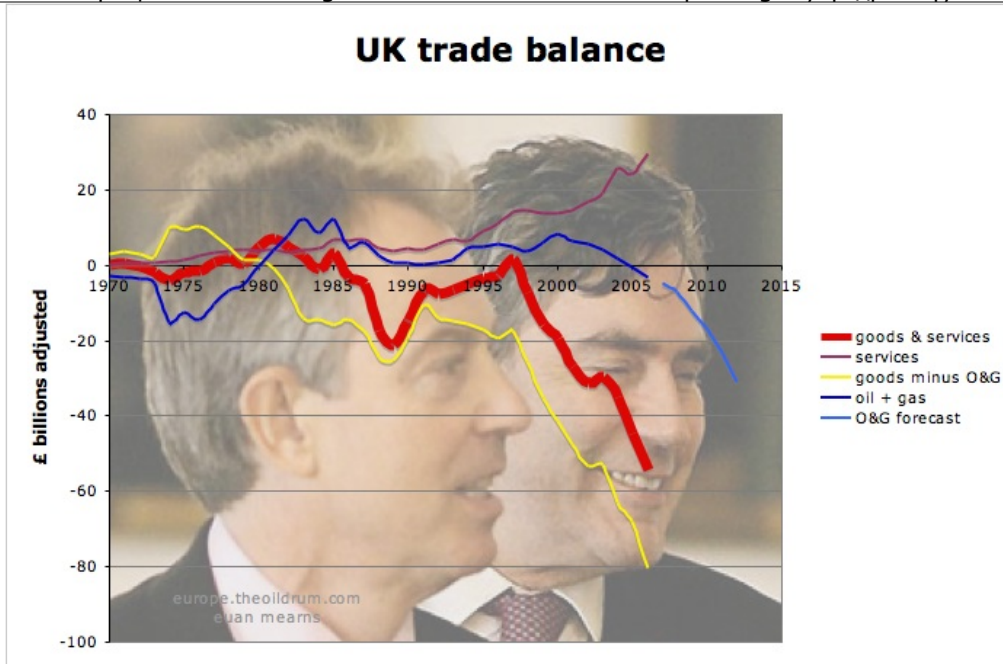
The UK Government

Last week the UK Government, led by Prime Minister Gordon Brown, was pre-occupied with un-muddling a tax muddle of their own creation and with preserving their own fragile popularity while a crisis to the nations energy supplies was unfolding. Gordon Brown has for too many years seen the North Sea as a source of tax revenues for his profligate spending and lacks understanding of the vital role North Sea oil and gas has played in providing energy and energy security to the United Kingdom.

The Government's understanding and approach to energy issues is utterly shambolic and this ignorance and indifference has contributed significantly to the current crisis. The government should be well-advised on the interconnectivity and interdependence of strategic resources within the UK and should be prepared to speak out and act when the nations vital interests are threatened.

It is Gordon Brown's government that has presided over and encouraged the debt binge that threatens to topple our financial institutions, which has made possible the sale of strategic assets to private equity venture capitalists and banks whose sole interest is to line their own pockets with little regard for public service and national interest.

Whilst other European countries make strides towards energy security and energy independence, the slide in North Sea production pushes the UK ever closer to the brink of energy poverty and electricity blackouts.



Leader Tony Blair and Follower Gordon Brown have presided over an unprecedented plunge of UK trade into the red. This is about to get much, much worse as North Sea oil and gas production declines and we are forced to import ever larger amounts of oil and gas from overseas using a currency in free fall (see below). This forecast is 9 months old and is based on what is turning out to be over conservative estimates of oil and natural gas price inflation. You can maybe run an economy on debt for a while and garner popularity as a result - but it is not sustainable and is down right irresponsible.



The plunging Pound against the Norwegian Krone (courtesy of [Yahoo Finance](http://uk.finance.yahoo.com/)). As the UK imports ever increasing amounts of gas from Norway and has little to offer of value in return, the currency takes up the slack in a nose dive towards the North Sea. Savvy investors will have seen this coming, little comfort though for the poor and elderly families in the UK who will shortly be unable to afford to heat their homes.

The Striking Workers

Since Margaret Thatchers [felling of the UK coal mining industry](#) and with it trade union power back in 1985, strikes and industrial unrest that once plagued the UK economy have

A two day strike over the protection of workers pensions does not seem unreasonable action to take. However, the workers should focus on venting their ire against their employer and doing what they can to ensure that undue hardship does not spill over to the Scottish People and other oil companies that have this nations best interests at heart.

Forcing closure of the Forties Pipeline and over 40% of UK oil and gas production is disproportionate to the pensions grievance, in my opinion, and so I would urge that if further industrial action is taken that a way is found to keep the power plant and pipeline open. Doing so will be a sign of moral strength.

By all means do all you can to damage the financial viability and reputation of your employer upon which your livelihood depends but try not to let this spill over into the wider community.

Pensions in an a fossil fuel energy declining world

The Grangemouth workers cannot be blamed for not understanding the energy decline crisis that confronts the OECD. Throughout the 20th Century, abundant and cheap supplies of fossil fuels (oil, natural gas and coal) powered industrial growth and economic growth upon which the current pensions system is based. Workers rightly believe that it was by the sweat and grease of their own elbows that created the wealth that allowed them to retire and enjoy their twilight years. In fact behind these workers elbows was a legion of fossil fuel slaves that amplified their endeavours creating the vast surpluses of the 20th Century (for some).

These fossil fuel resources whilst not yet exhausted are getting mighty tired, manifest by escalating oil, natural gas and coal prices around the world. The bottom line is that economic growth as we have known it will likely halt with peak oil and declining energy from fossil fuels. While this may spell The End Of The World As We Know It (TEOTWAKI) it does not have to spell total disaster for industrial civilisation.

Acceptance and understanding of the problem can allow industrialised economies to plan alternative energy supplies and to maximise the use of those we already have. But no matter which way you slice this cake, the 20th century energy **[Party is well and truly Over.](#)**

And so a message to the Grangemouth workers. The UK is running out of oil and the world will soon face oil production decline. Your plant will one day, in the not too distant future, be forced to close owing to a lack of feedstock (think about why BP sold it in the first place). Think about that and your future pension.

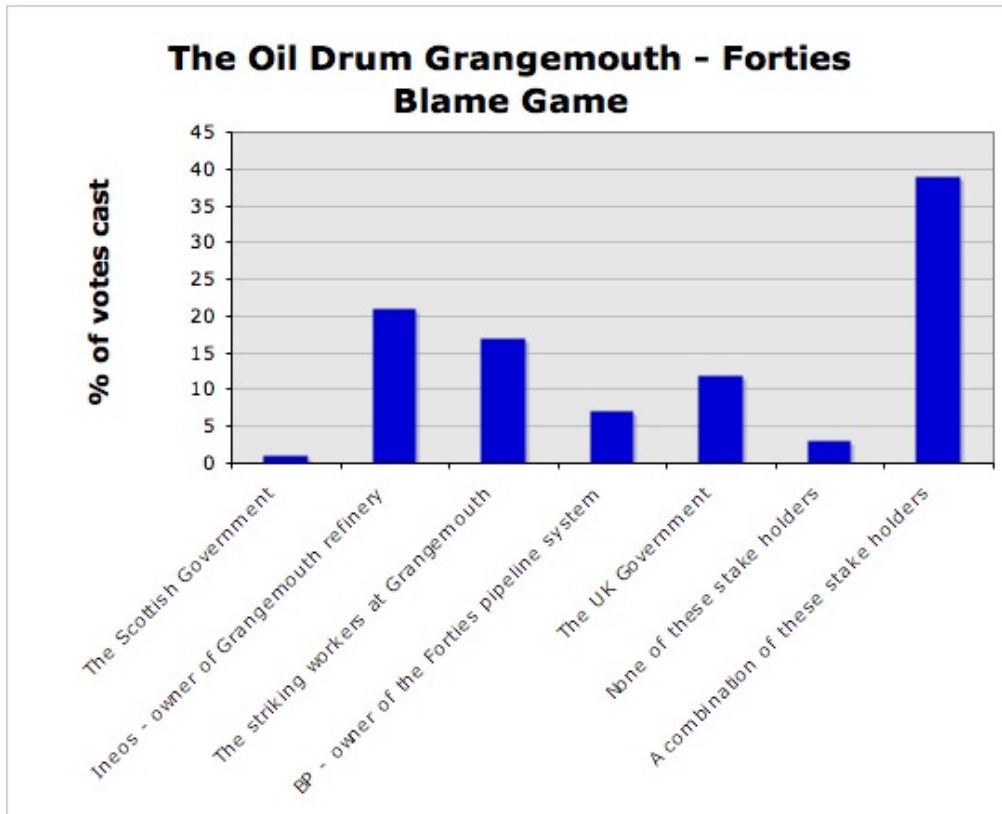
The Media

The BBC and ITN news in the UK were all but mute on this dispute until Friday. The story was covered by regional / Scottish news networks but only broke onto the main news once the strike and its consequences became apparent on Friday. Of course now it is main headlines over every news bulletin, newspaper and internet site. But there is a place for the mainstream media to bring these issues of vital national interest into the public and political eye before the wave breaks. On The Oil Drum we were **[discussing the potential disruption that might be caused by closure of the Forties Pipeline on Tuesday.](#)** Producers at the BBC need to ask themselves if they had prime time aired these concerns on Tuesday might this have cystalised public and political opinion and averted the closure of our energy life line?

Of course we cannot blame the main stream media for their ignorance. But misplaced priority in popular appeal will in fact fail the population badly one of these days.

So who is most to blame for the Forties - Grangemouth debacle?

Thanks to all who participated in our poll with results shown below after 502 votes had been counted (I considered withholding publication of these results but PG insisted the truth must be known).



In broad terms I agree with this result which is that in such circumstances a combination of factors are to blame for the complex system failure that we now witness. In detail, however, I beg to differ with the views expressed by the TOD readership - and not for the first time.

Top of my list of culpability is BP. They alone have responsibility for ensuring the operational integrity of the Forties Pipeline system and have failed the British people, their shareholders and the Government. New CEO Tony Hayward needs to get this house in order - fast.

Second on my list is the UK government for portraying either ignorance or indifference towards UK energy matters that with every day that passes threatens to sink this country into energy poverty and hardship. I expect to hear news of the creation of a new Department of Energy with a Secretary of State before the year is out. Former energy secretary [Brian Wilson](#) springs to mind as an imminently well qualified person to fulfill such a role.

Third equal goes to Ineos and the workers. Ineos and the demise of pensions are creations of the system built by Gordon Brown. Ineos and their employees are embarking upon a course of mutually assured self destruction.

The Scottish Government, with no real power in this domain, get off lightly as all powerless systems do. But a question for [Ice Cold Alex](#) - are you sure you are receiving sound advice on

In trying to make sense of this complex matter here are a few questions to answer and to start drawing dots to make a picture:

- Why did BP sell the Forties oil field?
- Why did BP sell Grangemouth refinery?
- Why did BP not ensure that they retain operational control over the Forties pipeline system?
- Why were banks so keen to lend such large amounts of money to buy assets that world beating companies no longer required?
- Why is the Ineos pension fund under strain?

Diligent analysts will find that the answer takes them down the path to the [Olduvai Gorge](#).



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