

# A Question of Balance



**How do we maintain a competitive and growing economy, and have sound policy that meets environmental objectives?**



# Europe has high environmental aspirations

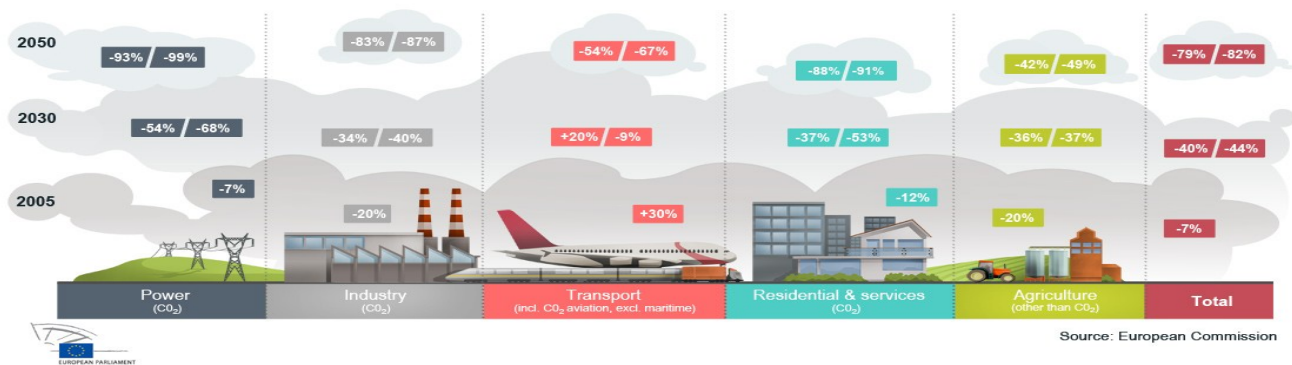
The Europe 2020 strategy, adopted by the European Council in 2010, aims at achieving the following climate and energy targets:

- To reduce greenhouse gas emissions by 20% compared with 1990
- To increase the share of renewable energy sources in final consumption to 20%
- To improve energy efficiency by 20%

EU Member States have committed to reach national targets, as defined in the National Reform Programmes. Furthermore, 2012 saw the launch of the European Commission's non-legislative report 'Roadmap for moving to a competitive low-carbon economy in 2050'. The roadmap includes plans and targets for the following sectors: power generation, industry, transport, buildings, construction and agriculture, aiming to achieve a minimum of 80% reduction target by 2050.

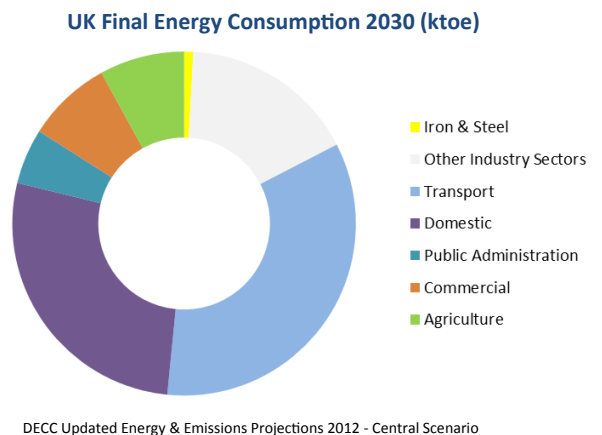
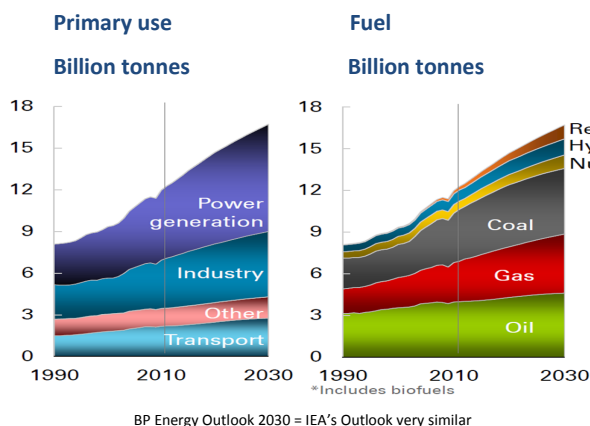
EU Directives are transposed into UK legislation.

## EU Low-Carbon Strategy



## ...but society needs oil to function

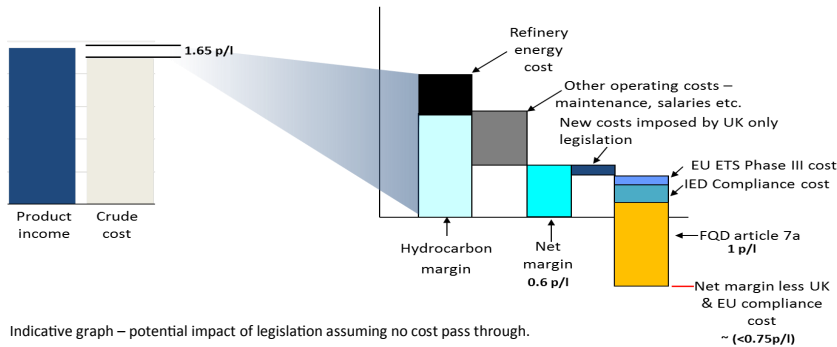
The International Energy Agency forecasts global primary energy demand rising by about 35% through to 2035, almost comparable to adding another United States to the global demand balance. For several decades to come, oil is still likely to be the most important fuel in the energy mix. In Europe, oil is set to account for 85% of total transport fuels in 2030 (IEA World Energy Outlook 2011). In the UK, oil is projected to account for over 32% of total primary energy demand, with transport accounting for 41% of final energy consumption (DDECC Updated Energy & Emissions Projections 2012 - Central Scenario). The projected global increase in demand for primary energy creates a tremendous challenge. Sustaining and maximising domestic production are key to ensuring a reliable, secure source of energy supply. **The right infrastructure, policy and regulatory framework, are a prerequisite to ensure that oil products can be supplied to consumers at affordable prices, meeting the UK's current and future energy needs in a way that is consistent with sustainable environmental policy and to facilitate economic growth.**



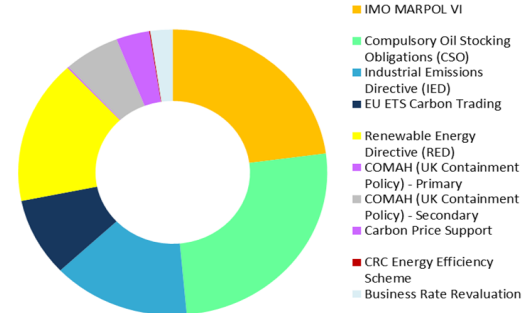
# Environmental aspirations have a cost

Against a backdrop of tough market conditions, cost pressures, supply vs. demand challenges, a burdensome legislative background and growing competition from the USA and new players in the Middle East and Asia, our downstream oil industry is at a key juncture. Oil will continue to play a major role in the UK's energy mix for many years to come. Most crucially, refineries are impacted by multiple UK and EU legislation which places on them challenging incremental cost demands in terms of operational and other requirements whilst severely disadvantaging them against EU and global competitors.

Crude cost and income from products UK refinery operating cost



Estimated cost impact of legislative requirements on UK refineries (2013-2030) £11.4 billion



Not including: Fuel Quality Directive (FQD) Article 7a and Product Quality. FQD 7a cost estimated in the indicative graph on the left. Most capital and operational costs are non-recoverable. Source: IHS Purvin & Gertz 2013

Indicative graph – potential impact of legislation assuming no cost pass through.

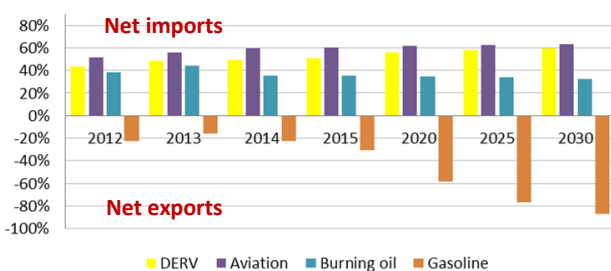
Margins shown are indicative, obtained under favourable market conditions.

## ...is energy supply at risk?

The 2013 IHS Purvin & Gertz report indicates that, with a level playing field with other refiners across the EU and world, UK refineries would be considered to be competitive; indeed, they represent what is termed a *core refining capacity* - refining capacity expected to survive and needed in order to keep the European market adequately supplied (IHS Purvin & Gertz). However, there is the prospect of significant increases in capital expenditure and operating costs for UK refiners as a result of proposed UK, EU and, in some cases, global legislation. **Circa £11.4 billion is estimated to be required to comply with UK and EU legislation to 2030. The legislative cost impact is likely to increase further once the impacts from legislation which has yet to be fully defined, such as the Fuels Quality Directive (FQD), are factored in.** The report concludes that “no industry would bear such an investment burden for no return. It would be highly likely that, when faced with such a large mandatory capital expenditure requirement that provides no return on investment, UK refiners could be forced to close more UK refineries”.

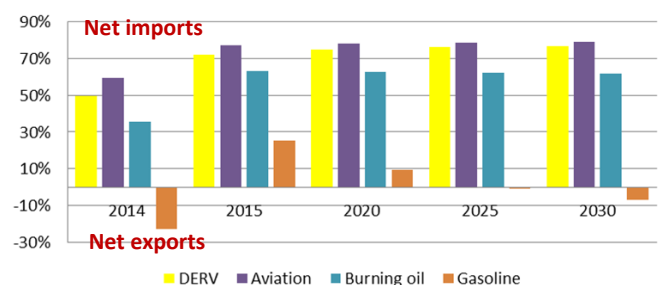
This would leave the UK even more exposed to the international refined product market for those products already at high risk, based on IEA measures developed to evaluate national energy security risks and resilience capacities. Using the IEA MOSES (Model of Short Term Energy Security) ‘net import’ indicator - 45% import dependence benchmark - and applying the benchmark to individual products, the UK is already above the 45%, importing 56% jet fuel and 48% diesel. In the event of further refinery closures, jet fuel imports could rise to 78% and diesel to 77% by 2030. In the UK, the Government is working with the refining sector to develop a strategic policy framework - *Refining Strategy* - due for completion in Autumn 2013. At EU level, a permanent EU Refining Forum has been established and competitiveness checks - *Fitness Checks* - to address EU refining’s international competitiveness, are due for completion in 2014. However, as proposed, *Fitness Checks* will not examine planned legislation or that being implemented (i.e. Industrial Emissions Directive (IED) and Fuel Quality Directive).

Refined Product Balance: Deficit in % for Scenario ‘As is’



Source: IHS Purvin & Gertz 2013

Refined Product Balance: Deficit in % ‘Refinery Closure’ Scenario



# ***A question of balance***

## **On one side**

- The UK refining industry makes a substantial contribution to the UK supporting over 88,000 jobs in the extended supply chain and wider economy. UK refining contributes, in a normal year, over £2.3 billion to the economy (Source: IHS Purvin & Gertz 2013) and each large refinery is estimated to inject ~£60m+ into the local economy where it is located (UKPIA estimate).
- Even up to 2030 and beyond, oil is forecast by the IEA to be a major source of world energy.
- The refining industry will continue to play a vital role in maintaining the country's fuel supplies, given the right conditions.
- To 2030, over £11.4 billion is estimated to be required to comply with a number of UK and EU policies. This figure does not include the Fuel Quality Directive and will rise further once this is factored in. Most capital and operational costs are non-recoverable.
- With a level playing field, the UK's refining industry is competitively placed against EU and Global competitors.

## **On the other**

- The UK's refining industry recognises the importance of sustainable environment policy that meets objectives but does not jeopardise competitiveness, employment prospects and mobility.
- In order to continue keep the wheels turning, the planes flying and the economy growing, as well as meeting environmental targets, a clear and balanced policy, based on sound science, is needed. Also, an approach that considers the impact on key manufacturing industries, such as refining, is paramount.
- Environmental ambitions can still be reached by amending policy, underpinned by practical and achievable measures, without disadvantaging industry.

## ***...the balance can be achieved***

The UK oil refining sector will continue to play a central role in our future as a reliable, resilient and secure source of transport fuels and feedstocks for other industries. In order to fulfil this role, UK refineries will require substantial investment. To attract this investment in a globally competitive market, the right policy environment, which does not place our industry at a disadvantage against global and EU competitors, will be key.

**The refining industry strongly believes that a balance between environmental ambitions and energy resilience can be achieved. For these reasons, UKPIA calls for:**

- **The DECC Refining Strategy to provide proposals to inform a future policy framework.**
- **At EU level, the Refining Forum's 'Fitness Checks' must address past and current legislation's effects on industry - e.g. Fuels Quality Directive (FQD) and Industrial Emission Directive (IED).**
- **For the FQD Article 7a, UKPIA advocates a linear and simple proposal: the GHG content of every fossil fuel sold at the pump to be characterised as a fixed default value calculated as an EU average. Likewise, the country of origin of the fossil fuel feedstocks can be calculated as an EU average, using publicly available data (i.e. EUROSTAT).**
- **Under the IED, UKPIA proposes:**
  - **The bubble concept must be recognised as a valid 'Best Available Technique' (BAT) as defined under IED Article 1(10).**
  - **BAT Conclusions and associated emission limit ranges must be based on robust evidence obtained from existing refinery operations using the BATs.**
  - **Robust cost-effectiveness and cost-benefit assessment methodologies must be agreed, recognising investments already made in emissions abatement.**
  - **It must be acknowledged, following revision of BREF documents, that the four year period for permit review and achievement of compliance is unmanageable where investment in new abatement technology is required to meet the revised emissions limits.**

**Economic recovery and growth will be driven by refined oil products provided by a healthy refining industry. Our call is to UK and EU legislators to address the Question of Balance.**