Written evidence submitted by the Downstream Fuel Association (OIL07)

Introduction

This response is submitted by the Downstream Fuel Association (DFA), which represents UK's biggest independent fuel importers and major supermarket fuel retailers accounting for in excess of 40% of petrol and diesel sold in the country.

Executive Summary

- UK refineries operate in a global market and face global competitive pressures.

- Shifts in product demand in the last decades have not been met by the necessary investments to upgrade UK refineries. In line with broader European trends, this has led to a mismatch in UK's refining output with excess gasoline production and not enough diesel and jet fuel.

- Product importers have ensured short term resilience and long term UK energy robustness by supplying diesel and jet fuel according to demand. They have the logistical infrastructure and the ability to do so in an efficient, cost effective and resilient manner.

- Importers source refined products and components for blending through global, sophisticated and deep markets which allocate resources efficiently. A significant proportion of these products do still come from UK refineries.

- The UK accounts for a very small and decreasing share of global refining demand. Refining capacity is increasing globally.

- UK importers have increased competition and driven prices down across the country. Lower energy prices have a major impact on the cost of living and the economy in general.

- The disruptions in the supply of liquid fuels that have affected the UK in the last 10 years have been overwhelmingly driven by domestic issues and would have become materially worse problems without the ability of importers to effectively respond in times of crisis.

- Not all UK refineries are the same but all of them will have to face the fact that UK's petrol excess capacity cannot be absorbed viably by international markets. This poses an obvious cap to the amount of diesel and kerosene that UK refiners can economically produce thus further limiting their ability to supply middle distillates to the country. Self-sufficiency in middle distillates is an impossible goal in any reasonable scenario without dramatic cost increases.

- We believe that not all UK refineries will be viable in the long term, but some are competitive and will survive without any interventions.

- A self supporting domestic refining capacity is a worthy policy goal but any intervention needs to be grounded in a clear understanding of its wider societal costs, so as to

avoid damaging existing competitive supply chains and refiners, which are competitive as a consequence of enlightened investment decisions over the years which should not be unfairly undermined.

Background

01. In the last five years, approximately a third of Europe's refining capacity has changed hands, been mothballed or converted to import terminals and storage facilities. In the UK, since 2007, 4 of the 9 then operating refineries have changed ownership, 2 have apparently been in unsuccessful auctions and two have ceased operations leaving 7 productive ones.

02. These events have created concerns about the long term viability of the UK oil refining sector, its optimum future size and the effect of any further demise in the industry on jobs and UK supply security.

03. The DFA contends that not all refineries are the same or play the same role in the UK supply chain and that a balanced approach of viable refineries and strategic terminals is the best way to protect the national interest.

04. In this respect, indiscriminately supporting UK refining may have unintended consequences. Protecting otherwise technologically and commercially obsolete refineries could lead to supply insecurity and be damaging to the broader economy and jobs as well as being a drag on the best and most robust refineries which have a relatively more competitive configuration.

05. Current dynamics in the UK petroleum refining industry reflect wider European and international trends. UK refineries suffer from an ageing and relatively subscale infrastructure, limited crude flexibility and a product mix which is not in line with current and projected demand.

06. These competitive disadvantages, accumulated over decades of underinvestment, coupled with declining liquid fuel demand and increased competition from refineries in emerging economies, have led to widespread consolidation and changes in the ownership profile of UK refineries.

07. Since the mid to late 1990s, international oil companies (IOCs) have started reconsidering their global investment priorities and focused their efforts on upstream projects whilst reorganising their downstream activities. In so doing, IOCs have concentrated their downstream assets in a smaller number of strategic locations and divested or shut down other facilities deemed uneconomical.

08. While this process was relatively orderly and part of a long-term strategic plan, other market participants, especially pure play refiners which grew to represent a significant percentage of European refining capacity, did not have the luxury of a

robust balance sheet and simply collapsed.

09. Refining margins tend to be cyclical. However, despite rationalisation, divestments and recent closures, European and UK refining has witnessed what could amount to a structural erosion in margins. All other things being equal, this is due, on one hand, to technological advances that put the relatively old UK assets at a global disadvantage and, on the other, to shifts in product demand from petrol to diesel.

10. UK refineries, built in the 60 and 70's and optimised to maximise petrol yields, have not been able to capitalise on the 'dieselisation' of the European car parc or on the growth of aviation fuel demand. Now saddled with a growing gasoline overproduction, they are less and less able to find export markets for it.

11. Older, less complex and smaller than the new mega refineries in emerging markets, UK plants have higher maintenance costs and have to compete on a global stage at a time when Europe is considered a strategic export market by emerging refining centres.

12. UK refining more than meets national demand in gross tonnage but looking beneath the headline numbers, it is in the product mix that UK refineries fall short in providing full coverage of what is needed for UK end consumption. They produce more petrol than is required but do not produce enough middle distillates (mostly diesel and jet fuel). Maintaining overall product balance depends on other players, who are making the investments to import diesel and jet fuel that the country needs.

The current UK market and the inevitability of a shortfall in middle distillates

13. According to the International Energy Agency's (IEA) World Energy Outlook 2012 central projection, in 2035 , European Union's energy demand for transport will be 270 million tonnes of oil equivalent (mtoe), of which 93% will come from oil, an annual compounded decrease of only 1.2% from the 2010 baseline (297 mtoe). Even in the most environmentally ambitious policy scenario developed by the IEA, in 2035, oil will still count for 65% of the energy needs for transport of the European Union.

14. Standalone terminals independent of UK oil refineries, but trading with them, account for in excess of 40% of all transport fuels consumed in the country. However, not all of the fuel supplied by these terminals is imported from overseas.

    Diesel almost always is, but, nowadays, UK refiners and terminals have become integrated with importers and wholesalers buying a significant share of UK petrol production which is then sold with the diesel that they import.

15. From 2006 to 2011, the share of imported fuels for UK inland delivery has been consistent at around 35% to increase only more recently in response to the closure of Coryton. This percentage does not reflect an overall shortfall in UK's refining output, rather a mismatch whereby UK refineries produce too much petrol and not enough kerosene type jet fuel and diesel.

16. Increased demand for diesel and jet fuel has built over decades. On an aggregate basis, however, in mature Western economies, the exceptionally high cost of upgrading the refining infrastructure to respond to these trends and the lack of obvious long term benefits have precluded the option of catering for these shifts in demand in the UK/European market.

17. UK refineries produce too much petrol which has historically found export markets in the US and Africa. Latterly, however, these markets are shrinking as the US is turning into an exporter in its own right and Africa is being increasingly supplied by more competitive Indian Ocean refineries. As a consequence, UK refineries will be forced to reduce output thus cutting their diesel and jet fuel production further, exacerbating their supply mismatch.

18. The prospects for UK refineries are therefore likely to get significantly worse in the near future. We note that the ability to market UK produced petrol is central to the projections made in the P&G Report[1]. We believe that this would require the highly unlikely reversal of long term global trading trends and investments in UK refineries of a magnitude that is not justifiable by the private sector and can never be expected to deliver a return on capital.

Factors affecting the competitiveness of UK refineries

19. Refining is a global business and the competitive position of UK refineries should be judged on this basis.

20. As with many other manufacturing processes, refining benefits from economies of scale and investments in technology. The age profile of UK refineries is in excess of 40 years therefore adding increased cost burden to operations. The lack of appetite for capital expenditures in UK/European refining is however balanced by investments in other parts of the world so much so that global refining capacity is steadily increasing thus worsening the plight of UK refineries.

21. Location is another factor with the associated dimensions of staff cost and differences in the logistics of sourcing feedstock and finding a market.

The global market for fuels and crude

[1] '*The role and future of the UK refining sector in the supply of petroleum products and its value to the UK economy*', a report prepared by Purvin & Gerz for UKPIA, accessed via http://www.ukpia.com/files/pdf/therolefutureoftheukrefiningsector.pdf

22. Trading in crude oil is global as are finished product markets. The former is undoubtedly more liquid but this feature does not necessarily benefit UK refineries as they are constrained in their crude intake to sweeter crudes which are more expensive and represent a modest percentage of globally extracted oils. Only 20% of global oil production supply can be classified as light and sweet, with the remaining 80% classified as medium/heavy and sour. An important factor is that excess crude production capacity is largely sour which means that in times of constrained supply, UK refiners cannot tap into the marginal crude supplier for relief.

23. Product importers, on the other hand, unconstrained by crude quality, can source products globally.

24. The IEA predicts that, in the next five years, a drop in the global trade of crude oil will be more than offset by a steady growth in the volume of traded refined products. On the back of substantial overcapacity building up especially in China and Saudi Arabia, it is anticipated that trade in refined products will change from mainly short-haul to longer distance. Aramco, the Saudi Arabia national oil company, is building three 400.000 b/d refineries which alone will be able to supply the entire import demand of a country such as France.

25. Companies importing finished fuels and fuel manufacturing/blending components into the UK and biofuels producers are now an integral part of the architecture of the UK fuel supply. Not only do they improve the UK long term supply robustness by diversifying supply and sourcing the diesel and jet fuel that cannot be produced in the UK, but importers also have the logistical infrastructure and the ability to promptly respond to short term crisis thus increasing UK's resilience and security of supply.

26. For instance, in 2012, owing partly to the closure of the Coryton refinery, UK production was, according to preliminary figures from DECC, 8.3% lower than in 2011. The decreased refining output was counterbalanced by the growth of imported fuels which increased by 13.9% leading to a seamless post-Coryton supply environment.

UK Resilience

27. For a long time, Europe, with its large presence of refineries and oversupply of liquid fuels, interpreted energy security mainly as availability of crude oil supplies. In this regard, the UK, owing to North Sea oil, is still in a very favourable position when compared to other European countries. However, it is now obvious that other considerations, including finished product supply resilience, market change dynamics and, crucially, the impact of the cost of living, must also form part of a more holistic and sophisticated analysis of UK resilience.

28. The resilience of a supply chain could be defined as its ability to react to disturbances and return to its original state or a more desirable one. Considering the current shortage of middle distillates in the output of UK/EU refineries, national security of supply for these products relies on the resilience and fluidity of international markets.

29. The international market for finished oil products is global, mature, sophisticated and flexible with a reliable supply system. In this sense, provided that crude and oil products are freely traded in open international markets, the preference between one supply route and another is one of economics and economic wellbeing for jobs and the economy.

30. Since the1973 oil crisis, the history of oil shocks including the Iranian revolution of 1978-1979, the Iran-Iraq War, the first Persian Gulf War in 1990-91 and the oil price spike of 2007-2008 has provided compelling evidence that the crude oil and refined product markets will, in an emergency, promptly reallocate and ration supply efficiently to avoid prolonged shortages.

31. In the last 10 years, there have been more internal UK issues than external shocks. In these cases, the price change needed to normalise the market again after the initial shock is an unknown. As guidance, however, the price elasticity of demand and supply for refined products is higher than that of crude oil. Correspondingly, short-term price effects of refined product shocks could be expected to be smaller than for equivalent crude oil shocks.

32. An often overlooked feature of the market is that, during an international crisis, the price of crude immediately jumps making refinery margins go negative. This may not matter much for vertically integrated oil majors as their upstream activities will compensate for the losses triggered by negative refining margins. Standalone merchant refineries, however, may succumb to the temptation to slow down or even shut down loss-making operations to restart production when economics are more favourable. Independent product importers, on the other hand, are not impacted.

33. The IEA has developed a framework to analyse the vulnerability of its member countries to short term energy supply disruptions including for finished products. This model, called MOSES (Model of short-term energy security), categorises countries based on a number of parameters and evaluates the vulnerability of domestically refined products, imported products and their supply chains and complements it by including the level of stocks held as a mitigating feature. In 2011, MOSES rated the resilience of the UK oil product import infrastructure as ‘high’, giving correspondingly high marks to the resilience of the petrol and middle distillates total flows. This means that the combined (domestic and imported products) vulnerability of the UK is considered low not unlike that of countries such as Canada and the US which import a significant percentage of their refined

products from abroad.

34. But it is probably Australia which provides the most convincing argument for favouring a multipronged approach where domestic refining and imports contribute to the overall security of supply by seamlessly complementing each other.

35. Net imports of refined petroleum products represented around 30% of total Australian consumption, excluding LPG, in 2008-09 and 2009-10. In 2012, Australia lost additional refining capacity with the closure of Shell's Clyde; Shell recently announced that, unless a buyer is found, their Geelong plant will be shut down too, lowering Australia's domestically produced fuels to approximately 40% of the country's consumption needs, a level significantly lower than that of UK's domestically refined product.

36. Two successive studies on the vulnerability of liquid fuel supply to Australia concluded that, as long as the country can access diverse and well-established supply chains, the planned replacement of lost refining capacity with import facilities would not lead to reduced fuel security. The latest study[2], published in October 2011 when the closure of Shell's Clyde was already on the cards, concluded that '*growing dependence on imports of petroleum products is not in itself a cause for greater risk of a supply disruption, provided the industry invests in import infrastructure. There is evidence that this is occurring as demand grows.'*

37. UK importers have become strategic for the UK security of supply both from a regional and from a product mix perspective. Without a robust and competitive import industry, the recent supply shocks affecting the UK, including the Stanlow and Grangemouth outages, various strikes and the collapse of Petroplus would have led to far more pervasive supply disruptions and hit the country much harder. It should additionally be noted that the nature of these supply shocks has been overwhelmingly domestic. In this sense, the domestic refining industry, without a sound and responsive import supply chain, far from being an asset, would have been a liability, at least in terms of security of supply.

Economics & prices

38. A crucial aspect of the benefits of having a thriving import industry and a correspondingly robust infrastructure is that importers act as catalysts for efficiency gains on a global scale and drive down prices wherever they operate in the UK.

39. In commodities markets with extremely modest price discrimination this means that importers, by virtue of the competitive pressures they bear on domestic refiners, are responsible for widespread reductions in wholesale margins which

[2] '*Liquid Fuels vulnerability assessment',* a study compiled on behalf of the Australian Department of Resources Energy and Tourism by ACIL Tasman. Accessed through: http://www.ret.gov.au/energy/documents/energy-security/nesa/liquidfuelsvulnerabilityassessmentreport2011.pdf

greatly benefits consumers and the UK economy at large contributing, for instance, to restrained commodity price inflation thus making UK plc all the more resilient to external shocks.

40. This phenomenon has been demonstrated time and time again. Suffice to say that the pre tax price of petrol in the UK is consistently amongst the lowest if not the lowest of OECD countries and that price levels for diesel are not dissimilar.

41. Without importers or with artificial trade barriers and protectionist policies, the wholesale price of hydrocarbon products in the UK would be set at a level that gives domestic refineries a return, thus damaging consumers who would be paying higher prices.

42. Any consideration on (artificially) preserving employment levels in refining cannot divorce itself from the costs associated with it to the wider society. If supporting the UK refining industry means implementing policies that erode competition and market transparency, the implications of potentially higher fuel prices to the UK consumer/industry need to be fully understood and factored in from a wider societal perspective.

Conclusions

43. In a globalised refining product market, all UK refineries will have to face increased competition from facilities that can efficiently process sour crudes and yield the right mix of light and middle distillates. But not all UK refineries are the same. Some of them are probably technologically unfit to stand on their own in the long term without major additional investments; some will have to face significant investments just to comply with health and safety requirements, let alone to remain viable. Some will remain competitive on a world scale.

44. It is important not to consider all of them to be in the same predicament.

45. Not unlike other businesses, UK refining is subject to competitive pressures that are often global in scale. Returns on investment (or equity for that matter) are not a given even for the best managed private undertakings operating in an open economy. Pretending it to be a prerogative of UK or European refiners would be illogical and inconsistent.

46. In our opinion, there is not a single market-driven scenario where all currently operating UK refineries can survive in the medium to long term.

47. A self-sustaining UK-based refining capacity is a worthy policy goal and one with obvious political appeal. Achieving this, however, will require a balanced approach grounded in a deep understanding of supply chains and an appreciation of how integrated UK refineries are with importers and on how instrumental these are to UK energy supply resilience.

48. More importantly, however, we believe that any measure should be developed on the back of a realistic assessment of the likely impact on fuel prices, UK consumers and, crucially, UK employment and economy.

49. We are advised that in the forthcoming weeks DECC will issue a call for evidence to help inform their review of the UK refining sector. The DFA looks forward to articulating its position in a more complete response in due course.

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