## Aggregates in England : economic contribution and environmental cost of indigenous supply

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Aggregates represent one of the largest material flows in the UK economy; however, the importance of these minerals in underpinning economic activity is frequently not recognised. Features such as the spatial imbalance between resources and demand centres, exacerbated by changes in demographics and public perception, are placing increased pressure on the planning system to maintain supply. This paper sets out the direct and indirect economic contributions made by the indigenous aggregates industry to the English economy through Gross Value Added and employment sustained. It describes the key role of aggregates in construction activities, assesses the links between infrastructure development and economic growth. In 2005, aggregates extraction directly contributed £810 million of Gross Value Added to the English economy. Primary aggregates are, however, extracted at a cost to the environment and this cost, based on amenity value reduction, is estimated by updating previously published contingent valuation data. Estimates for the costs associated with carbon dioxide emissions are derived from values published by the European Union and, separately, by the UK Government. These two elements combined result in an environmental cost of indigenous extraction of £445 million in 2005. Additionally, an examination of the potential for a significant increase in the level of aggregate imports into England is made and the consequences assessed. This includes an evaluation of shipping costs and port capacity, and concludes that there are significant barriers to any substantial increase in the level of aggregate imports into England. As a consequence, indigenous supply is likely to predominate into the foreseeable future.