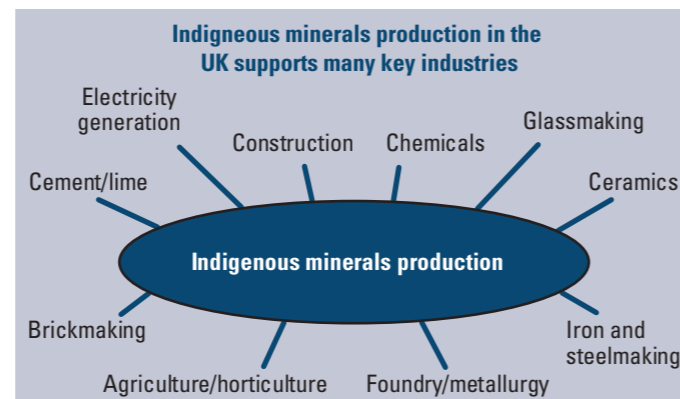


SAFEGUARDING OUR MINERALS SUPPLY

The national minerals policies set out in MPS 1 specifically address the need to safeguard mineral resources, including the requirement to define 'mineral safeguarding areas' to protect mineral resources from sterilisation by non-mineral development. MPS1 also deals with policy regarding the supply of minerals and requires planning bodies to identify those minerals of national and regional significance and to include policies for them in their regional spatial strategies (RSS).



□ Making the most of our own resources

Indigenous mineral production brings obvious benefits, in terms of preserving diversity of supply and also contributing to the economy through employment, investment and national income, as well as underpinning the competitiveness of the downstream industries they support. There is a real risk that user industries would be placed at a competitive disadvantage if they could not source minerals locally. This might lead to their relocation or closure with attendant impacts on future investment and consequent loss of jobs.



The continuity of supply of indigenous minerals depends on resource availability and, fundamentally, access to these resources. Maintaining access to resources is a key aspect of national minerals policy and guidance as provided in MPS1*.

There are a number of other measures that will help to maintain the continued supply of UK minerals. These include: development and maintenance of an efficient transport infrastructure to centres of demand; more efficient use of resources and the use of alternative materials; and improved knowledge of future demand and supply for minerals.

*MPS1: Minerals Policy Statement 1: Planning and Minerals. November 2006. Department for Communities and Local Government.

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□ Security of minerals supply

Concerns about the security of Britain's supply of minerals have a long history. They have been heightened at times of conflict and political instability, giving rise to renewed interest in indigenous mineral resources, but they are by no means confined to such periods. After the Cold War and with increased political stability in South Africa, concerns over supply disruptions in the USSR and South Africa gave way to a general acceptance that 'the market will provide'. However, today, with increasing global competition for resources and greater import dependency, notably for energy minerals, security of supply is again giving rise to concern.

The UK and EU are highly dependent on imports for a wide range of minerals and metals. Sources are often few in number and competition for supply is putting increasing pressure on world commodity prices. With the rapid depletion of our oil and gas, Britain became a net importer of gas in 2004 and will become a net oil importer by 2010. Coal imports are also at record levels. It is inevitable that all mineral imports are vulnerable to a degree depending on their source. However, can we assume that the supply of minerals from indigenous sources that are critical to the UK economy, such as aggregates, cement and chemical feedstocks, are secure?



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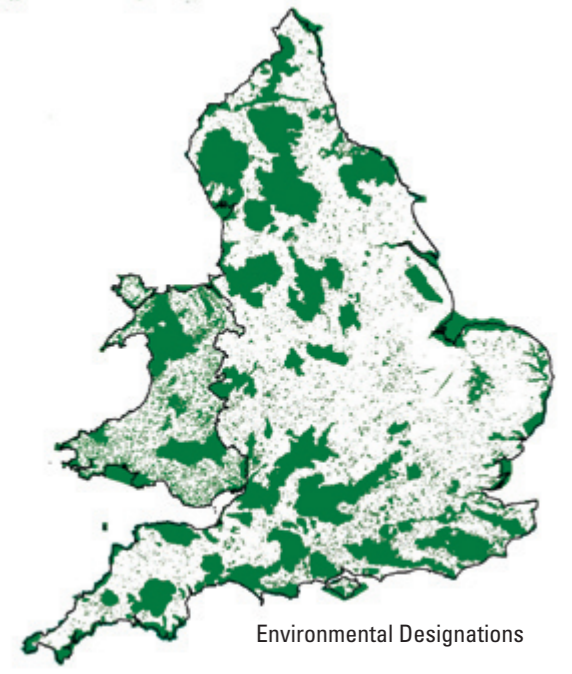


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Environmental Designations

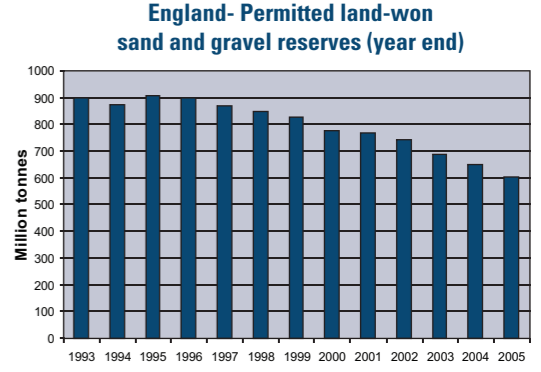
not be worked everywhere they occur, but reduced accessibility to resources is the greatest threat to security of supply.

Environmental designations, such as National Parks, and nature conservation designations, such as Special Areas of Conservation, are a major consideration in the access to mineral resources. The locations of many mineral resources coincide with these designations and their cumulative impact is seriously restricting future options for mineral development and supply.

Another important factor that affects access to mineral resources is that there is often public opposition to minerals-related development. While it is important to address these concerns, it is essential that decisions relating to future mineral development are based on informed and rational discussion of all relevant issues of local, regional and national significance.

□ **Declining aggregate reserves in the UK**

Aggregates are the most commonly used construction minerals in the UK and are essential for the sustainable development of a modern economy. However, a marked recent decline in reserves indicates that indigenous aggregate supplies are increasingly vulnerable. Reserves of land-won sand and gravel in England have declined from 907 million tonnes in 1995 to 603 million tonnes in 2005. The South East region is the worst affected with reserves declining by 61% from 207 million tonnes in 1995 to 81 million tonnes in 2005. To a large extent the decline in reserves is caused by the failure to replenish sales tonnages with new planning permissions.



□ **Improving security of supply**

There are several ways in which security of supply can be improved. Increasing the use of alternative materials and the reuse/recycling of minerals and mineral products can make an important but finite contribution.

A key element of sustaining indigenous production is a continuing supply of planning permissions. The landbank – a stock of planning permissions for the extraction of minerals - is a widely used means of securing and maintaining adequate supplies of non-energy minerals. MPS1* requires that MPAs maintain a landbank of at least 7 years for sand and gravel and 10 years or longer, if appropriate, for crushed rock.

Potential Years' Supply of UK minerals

Mineral	Reserves† (Mt)	Years' supply†
Land sand & gravel *	603	11
Crushed rock *	3 556	43
Marine aggregates	142	7
Surface coal	45	10
Deep mine coal	110	>20
Ball clay	70	up to 100
Fluorspar	1.5	4

* England only Approximate figures for 2005

† Gross figures may mask significant regional and local imbalances in relation to production capacity and quality

* See overleaf

□ **Continuity of indigenous minerals supply**

Continuity of supply of indigenous minerals is dependent on four main factors:

- Availability of resources – this is dependent on geology, but with no resources clearly there can be no production.
- Economic viability – can we produce minerals profitably and competitively in global and regional markets?
- Is there a market demand, either domestic or international?
- Access to resources – this is achieved through a 'licence to operate' that principally, although not exclusively, involves the provision of adequate planning permission to sustain production.



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'criticality' and 'vulnerability' of minerals

Concerns about security of supply are largely focussed on those minerals whose uses are critical to the economy and whose supplies are vulnerable to disruption. Criticality relates to the contribution a mineral makes to the national economy while vulnerability relates to the risk of interruption to supply. On this basis, energy minerals are both critical and vulnerable, while indigenous minerals are generally much less vulnerable but may be critical.

□ **Resource availability**

Minerals can only be extracted where they occur but the UK is fortunate in being relatively well endowed with a wide range of minerals that can be worked profitably. Hard rock resources suitable for crushed rock aggregate are extensive, albeit unevenly distributed, with deficiencies in southern and eastern England where demand is high. In contrast, fluorspar resources, which occur mainly in narrow veins, are scarce and geologically constrained.

- Increasing scarcity in UK
- Hard rock
 - Sand and gravel
 - Cement raw materials
 - Brick clay
 - Salt
 - Ball clay
 - Kaolin
 - Gypsum
 - Shallow coal
 - Potash
 - Silica sand
 - Fluorspar

The grade or quality of a resource is also an important consideration in the availability of supply. For example, high-quality silica sand resources that meet the demanding specifications of the colourless glass industry are relatively scarce and certain premium brick clay resources, such as the Etruria Formation, are also of limited extent. The planning system has an important role to play in safeguarding mineral resources, especially those with valuable physical or chemical properties that have a limited geographical extent.

□ **Resource accessibility**

Mineral resources and reserves are economic as well as physical entities. Reserves need to meet not only the requirements of geological certainty and economic viability but they must also be legally accessible before they can be extracted. This means an agreement with the mineral owner must be made as well as gaining planning permission.

Access to resources is a major concern of the UK minerals industry. Access restrictions threaten the continuity of supply required to sustain UK industries that depend on minerals. Minerals can clearly

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