As the era of energy abundance has been suddenly replaced by the era of threatened energy scarcity, western societies have become obsessed by fear of an 'energy gap'. In the United Kingdom even the bonanza of North Sea oil and gas has failed to dispel these fears, and worries are repeatedly expressed about what will happen when the North Sea oil wells run dry.

The sudden transformation of attitudes towards energy supplies in the 1970s has had profound implications for the United Kingdom's coal industry, for so long the basis of industrial development and economic progress, but supplanted in the post-war period by cheap imported oil. The 1960s saw a rapid running-down of the coal industry throughout Western Europe, though in the UK the rate of decline was moderated by socio-political factors. The coal industry became the major progenitor of depressed areas. In the 1970s upheavals in world energy markets have enabled the National Coal Board to plan a dramatic end to the downward output trend and even to propose major re-expansion of the industry by the year 2000. These endeavours, however, face considerable obstacles and some commentators believe that NCB plans are too ambitious. Indeed it has been asked recently whether the resurgence of the industry is permanent, or no more than a temporary amelioration of the long-term tendency to decline (Griffin 1977).

An earlier paper by the present authors, (North and Spooner 1977), described some of the salient features of the Plan for Coal (National Coal Board 1974) and identified major problems facing the industry in its implementation.

A first problem was securing markets for expanded coal output. Secondly, the opening of new mines in rural districts beyond the existing mining frontier presented serious environmental challenges, relating both to the impact of mining on the physical environment (subsidence, visual intrusion, etc), and to the impact of coal miners on the social environment. Other issues that caused concern were the effect of shifting mine locations on regional and sub-regional economic problems, and the adequacy of the planning machinery to handle major projects of this kind. Many of these problems had been raised in the context of the newly-found Selby coalfield in mid-Yorkshire (North and Spooner 1976). The Selby project gained planning permission in 1976 and construction has begun. The release of information by the NCB about schemes to exploit massive coal finds in the Vale of Belvoir and adjacent districts of north-east Leicestershire has produced a storm of protest from sectional interests even before formal planning permission has been sought, in a climate of intensifying argument over energy policy and the need for expansion of coal mining. In this last respect the context has certainly changed since the Selby planning inquiry, when the government's inspector, could detect no outright objection to the grant of planning permission to the applications and the principle that coal contained in the site should be worked in the national interest was accepted by all witnesses' (Department of the Environment 1976). But in 1975 (the year of the Selby inquiry) OPEC actions on oil prices were very recent; three years later the hysteria has subsided, North Sea oil has begun to flow in quantity, and many have begun to question the newly established credo about imperatives of energy policy.

Against this background, this paper presents an interim report on progress with the 1974 Plan for Coal, and relates...
this to the changing geography of coal mining in the UK since circa 1960 at a number of scales. The first section reviews national trends in the industry and the Plan for Coal. The second section describes trends in the inter-regional pattern of coal production. The third section examines the shifting intra-regional pattern of coal production in the Yorkshire section of the great central coalfield of Yorkshire, Derbyshire and Nottinghamshire, which accounts for a growing share of national coal output. A final section looks at the sub-regional or local scale at the largest single coal project ever attempted in the UK — the project for the Selby coalfield. The emphasis is placed on trends in the coal industry, examining the shifts of direction that are taking place in the 1970s. Because of the problems of obtaining adequate data on a regional basis, open-cast mining is excluded from most parts of the discussion, and the focus is upon deep-mined production. Open-cast mining accounted for 9.4% of UK coal production in 1976/77.

The National Scale and the 1974 Plan for Coal

The story of the decline of the coal industry since its post-war production peak in 1957, (224 mio tons annual output), has been recounted many times, (see, for example, Allen 1973, Blunden 1975, Griffin 1977), and will only be summarized. In the late 1950s the acute coal shortages that had characterized the early post-war years gave way to over-supply. The industrial recession of 1958, intensifying competition from other fuels (principally oil and natural gas), and rapid improvements in coal-burning efficiency, combined to effect a decline in coal output and employment. Saleable output of coal from NCB deep mines fell by 42% between 1960 and 1977 (Fig 1). Over the

Fig 1

Saleable output from NCB deep mines, 1960—1976/7, by regions

From 1962 onwards, NCB accounting changed from the calendar year to an April to March financial and operating year.

same period total employment fell by 59% and the number of collieries decreased by more than two-thirds (Fig 2 and 3). Despite government protective measures towards coal, (including the banning of imports from 1959 to 1970, and the duty imposed on fuel oil after 1961), all markets except electricity generation declined, with some like railways and gas manufacture almost disappearing, and the electricity generation declined, with some like the railways