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**COAL INDUSTRY RESTRUCTURING
– LESSONS LEARNT FROM WESTERN EUROPE**

(prepared by the secretariat
in cooperation with IEA Coal Research – The Clean Coal Centre¹)

I. INTRODUCTION

1. The purpose of this paper is to highlight the wealth of experience available, in particular from western Europe, to countries with economies in transition to mitigate the severe economic, social and environmental impacts of coal industry restructuring. The paper also looks to raise the issue of whether the transfer of this experience to transitional economies is being adequately facilitated and, if not, the role that the ECE secretariat could play to address and/or improve the situation.

2. This paper serves to encompass two of the key roles of the Ad Hoc Group of Experts on Coal and Thermal Power under its Terms of Reference, notably “to provide a forum for the exchange of information and experience among member countries on the ongoing institutional restructuring and market adaptation of the coal and thermal power sectors” and “to pay special attention to the transfer of knowledge and experience to member countries in transition”.

¹ IEA Coal Research – The Clean Coal Centre (IEACR), Gemini House, 10-18 Putney Hill, London SW15 6AA, United Kingdom, tel: +44 20 8780 2111, fax: +44 20 8780 1746, e-mail: mail@iea-coal.org.uk, website: <http://www.iea-coal.org.uk>

3. A draft questionnaire on the “Economic and Social Impacts of Restructuring of the Coal Industries of the Transitional Economies” has been prepared by the secretariat (ENERGY/GE.1/2002/6) for review and discussion at the fifth session of the Ad Hoc Group of Experts on Coal and Thermal Power. It is intended that this paper be used as a supporting document for the finalisation of the questionnaire.
4. Whilst progress in coal industry restructuring has clearly been made in the coal industries of the economies in transition in terms of viability, efficiency and social-acceptability, the size of the adjustment and financial resources still required poses a significant challenge to both the national governments and the coal companies. There are still key opportunities for the policy makers and affected communities in the transitional economies to benefit from the experience of restructuring programmes put in place in other countries and regions, particularly in the area of economic regeneration.
5. It is critical that any coal industry restructuring process is implemented in parallel with accompanying economic and social reconversion measures. However, western European experience shows that a perfect timing between the two has rarely been achieved and the reconversion process has usually commenced later than the restructuring process. Additionally, the implementation of policies, which ensure that economic regeneration programmes are successful in the long term, has been found to be an essential tool to mitigate the adverse economic, social and environmental consequences of restructuring. Environmental degradation is normally compounded by economic decline, and hence reversing this decline also leads to positive benefits for the environment.
6. The paper is not comprehensive and only looks to focus on the experience of western European countries in coal sector restructuring and the potential benefits of this for transitional economies; i.e. in terms of the opportunities for transfer of knowledge, technology and experience from ‘west to east’.
7. However, it is recognized that there are marked differences between the circumstances in the western European developed economies, and the transitional economies prior to restructuring, particularly in terms of the move away from central planning, the existing organizational and administrative structure, and the available resources (human and financial) and expertise to implement key – and often painful – policies. Hence, in some respects the experience in coal industry restructuring to date of Central European economies such as the Czech Republic, Hungary and Poland may be more applicable to transitional economies (i.e. ‘east to east’ transfer) than that of western Europe. No attempt is made in this paper to address the important and valuable prospects for constructive transfer of knowledge, technology and experience of coal industry restructuring from ‘east to east’. This could serve as the basis for future discussion and investigation.

II. WESTERN EUROPEAN COAL INDUSTRY RESTRUCTURING

8. Western Europe has experienced a significant reduction in its domestic coal industry. This issue was reviewed in the IEA Coal Research Report (IEACR) "Experience from Coal Industry Restructuring"² (also refer to section III and Annex I). During the second half of the twentieth century hard coal production declined in western Europe by some 80% from a level of over 450 million tonnes, whilst employment levels fell from around 1.8 million to fewer than 100,000. Employment levels in the region's lignite sector have also been significantly reduced.

9. The key countries in western Europe affected by coal industry restructuring are Belgium, France, Germany, the Netherlands, Spain and United Kingdom.

10. In Belgium and the Netherlands coal production has now completely ceased – Belgium has, however, retained a small-scale coal industry based on coal reclaimed from waste tips. The coal industries of France, Germany, Spain and United Kingdom are being progressively reduced and restructured. As a result of this restructuring of the coal sector, the period 1960 to 2000 saw an overall 94% reduction in coal-industry employment in Belgium, France, Germany, Netherlands and United Kingdom. While in 1960 there was a combined workforce numbering just over 1.5 million in these countries, by 2000 this had decreased to around 93,000 workers. Table 1 highlights the changes in coal production and workforce in 2000 compared to 1980 – the Netherlands has been excluded due to it ceasing coal production at the end of 1974. However, these figures only include those directly employed in the coal sector and not those indirectly employed, for example, in business and commerce in the regions where the coal mines are located. If this multiplier effect were to be included, the impact would be much greater.

Table 1: Coal Production and Employment in Principal Western European Coal Producing Countries, 1980 and 2000

Country	Total Coal Production (Mt)*			Number of Employees		
	1980	2000	% Decrease	1980	2000	% Decrease
Belgium	8.02	0.38	95	21,000	0	100
France	22.75	4.74	79	63,000	9,000	86
Germany	484.22	205.07	58	339,000	74,800	78
Spain	28.29	23.45	17	36,000	18,000	50
United Kingdom	130.10	31.96	75	184,400	9,000	95

* includes hard coal and lignite

Sources: IEA Coal Research² and IEA³

² Walker, S., 2001, *Experience from Coal Industry Restructuring*, IEA Coal Research Report CCC/48, 2001, London.

³ IEA 2001, *Coal Information 2001*, IEA, Paris.

11. In 1988, a European community-wide association known as EUR-ACOM (Action for Mining Communities) was established, comprising over 400 local authorities in current and former coal-mining areas of Belgium, France, Germany, Italy, Portugal, Spain and United Kingdom. A key objective of EUR-ACOM has to been to lobby for the increase in the “input of resources to coal mining communities in the European Union in order to aid their economic, social and environmental regeneration”. In this regard, since its foundation EUR-ACOM was closely involved in the development of a European Community regional development initiative for the benefit of the coalfield areas, known as the RECHAR Programme. Although the RECHAR Programme formally ended in 1999, a number of projects initiated as part of the scheme are still under way.

12. The second phase of the RECHAR initiative, known as RECHAR II, aimed to support the economic conversion of the areas of the European Union most significantly affected by the decline of the coal industry. Its support programmes focused on environmental rehabilitation, new business activities and enhancement of human capital/skills. The target groups for support were: communities, small and medium sized enterprises (SMEs), and employees who were threatened by unemployment. One example of a programme that was approved by the European Commission under the RECHAR II Community Initiative centred on the North East of England, largely the Northumberland and Durham coalfield but also including the Tyne and Weir conurbation, encompassing a population of 1,548,000. Building on the 1990-93 RECHAR programme, RECHAR II covered the period 1994-1999 and comprised the following measures:

- development and improvement of mining-degraded and derelict land;
- coalfield image improvement;
- mining community economic development;
- business development and support;
- infrastructure for economic diversification;
- tourism development;
- coalfield economic conversion bodies;
- coalfield human resources development; and
- technical assistance.

The Community part-financing for this programme amounted to 46% of the total investment, the remainder being provided by national and regional authorities and the private sector. Community finance was provided by the European Regional Development Fund (ERDF) and the European Social Fund (ESF).

13. Another organization with experience of benefit to transitional economies is the European Resource Centre for Industrial Restructuring and Development (CERRM), which was created in partnership with the European Commission (Regional Policies General Directorate) in 1993. CERRM aims to “identify the most successful methods of restructuring and redevelopment over the past 25 years, improve on them where possible, and make them available to regions and organizations facing regional development, industrial restructuring and social conversion problems in the future”. CERRM can assist organizations and regions in a range of ways, including: (i) analyzing their restructuring problems; (ii) proposing redevelopment policies; and (iii) constituting teams of experts able to bring practical solutions.

III. EXPERIENCE FROM COAL INDUSTRY RESTRUCTURING: REPORT BY IEA COAL RESEARCH

14. The other purpose of this paper is to draw attention to the comprehensive report “Experience from Coal Industry Restructuring” authored by Mr. Simon WALKER and published in July 2001 by ‘IEA Coal Research – The Clean Coal Centre’ (Report Reference: CCC/48 and ISBN 92-9029-361-6; to obtain further information regarding the report and/or to purchase a copy visit the IEA Coal Research website at: <http://www.iea-coal.org.uk> or send an e-mail to: mail@iea-coal.org.uk).

15. This 73-page report focuses on the measures undertaken by the authorities in six of the key western European countries affected by coal industry restructuring in the last 40 years, notably Belgium, France, Germany, Netherlands, Spain and United Kingdom. For each country, it highlights the different aspects of the programmes put in place to try to offset the social and economic consequences of the loss of a major employer on the worst affected communities and regions. Following a review of the different approaches taken by individual governments, within the regional assistance framework established by the European Union, the report evaluates the experience that has been gained. The key goal of the report is to aid decision-makers in countries with developing or transitional economies, where the restructuring of the coal or other major industries has yet to take place, by suggesting key aspects for consideration, based on this experience.

16. The report also provides an evaluation of the key themes and issues common to the countries reviewed that either had direct implications for the way in which the coal sector restructuring needed to be addressed, or were found to be critical for successful restructuring. These issues include:

- (i) The mining psyche: a strong sense of community: the solidarity throughout the coal sector in western Europe, which also exists in the transition economies, was found to be an important asset that needed to be recognised and channelled, for example through community-based schemes aimed at local economic regeneration programmes.
- (ii) The importance of maintaining economic activity: it was established that the extent to which communities were found to be affected by coal sector restructuring was dependent upon the measures implemented to maintain economic activity in the affected area/region. The ability to maintain economic activity during the restructuring process, as opposed to providing replacement employment after the event, clearly assisted in minimizing the social and economic impacts. In addition, the authorities of the six countries reviewed all emphasised the critical role of SMEs in the provision of alternative employment. The business environment needed to be conducive for SMEs to prosper – existing regulations were often too cumbersome and complicated, so hindering business development and innovation, in particular for SMEs, and hence impeding start-ups.

- (iii) The risk to social structures: it was found that any inability or unwillingness on the part of the governments to offer positive assistance to communities affected by the loss of their key source of income could easily result in a downward spiral of economic decline that was then difficult to stop. The mass unemployment in a region affected by coal sector restructuring could lead to the worrying breakdown of the social relationships that previously bound the community so tightly together.
- (iv) Early retirement versus alternative employment?: in all of the countries studied, early retirement was one of the tools used by governments to reduce the coal mining workforce without creating the need for additional jobs. However, the terms and conditions attached to the early retirement schemes were extremely variable, and were often readjusted repeatedly in response to changing circumstances.
- (v) Inter-agency relationships: there was found to be a strong correlation between the successful implementation of economic regeneration programmes and the level of cooperation that existed between the various agencies with responsibility for the running of different areas of the programmes. Again highlighting the importance of economic regeneration, it was also found that there appeared to be significant benefit when governments at the regional level were able to make and implement decisions regarding economic regeneration.
- (vi) Maintenance of community services: historically, it was common practice for mining companies, both state- and privately-owned, to put in place a comprehensive infrastructure to support their operations, including employee housing, social facilities, and other services. These social facilities could be of markedly better quality than those provided by government agencies, posing a dilemma for the government when mine closure occurs; i.e. should the government maintain the higher level of services previously provided by the mining company (and thus subsidise the ex-mining area) or should it allow the level of service to sink back to the level 'normally' provided? The study highlighted that the issue of how the transfer of social responsibilities was handled was very contentious and needed careful consideration.
- (vii) Attracting alternative employment: opportunities for self-employment by former coal industry workers were found to be very limited unless the individuals in question could utilise skills or interests that they already possessed. As previously highlighted, a common theme of the economic regeneration programmes put in place in western Europe has been the strong emphasis on SMEs. This onus on SMEs is due largely for reasons that they are easier and quicker to set up and start trading, and hence to provide employment, rather than that there is no longer a place for larger businesses in the post-coal mining economy.

- (viii) Job search assistance: the experience of western Europe revealed a wide scope in the assistance provided to former coal industry workers during the search for new employment, ranging from the minimum of personal counselling and help with areas of the job application process that may have been unfamiliar to the individual, through to the other extreme of actually placing candidates in jobs that had been specifically identified as being suitable for a particular individual.
- (ix) Provision of training: a common theme of all the countries reviewed was the training offered as a way of providing former coal workers with a new set of skills that would make them more employable in alternative job markets. However, the extent of the training provided and the timing between loss of work/redundancy, provision of training and finding new employment varied significantly between countries. Another key area highlighted was the benefit of close cooperation and dialogue between the trainers, the potential new employers and any other agencies involved. Although the adoption of this approach was found to incur higher costs in the short term, these were outweighed by the longer-term benefits of job security and ability to maintain economic activity in the affected region.
- (x) Provision of business support and financial advice: a number of economic regeneration programmes highlighted the importance of providing business support to and working closely with SMEs during their first years of development to ensure their long-term success and viability. Additionally the provision of financial advice to former workers who received relatively large lump-sum redundancy payments was found to be essential.
- (xi) Education: it was found that in most coal mining regions, the post-school or tertiary education had been targeted to meet the needs of that sector. Hence, coal industry restructuring had led to the need for the emphasis on tertiary education to be changed in order to meet the requirements of other industries/employers.
- (xii) The costs involved: whichever approach is adopted regarding coal industry restructuring, the overall costs are enormous. It was found that in most of the countries reviewed, the governments implemented a two-pronged approach: offering early retirement to as many workers who were eligible as possible; and providing a combination package to the others of redundancy payments, assistance in finding new work and facilitating employment for those still of working age.
- (xiii) Community-based responses: a key feature, particularly since the mid-1980s, of the western European coal industry restructuring was the active involvement of organisations representing the interests of the communities most affected by the restructuring process. The benefits to the coalfield communities of pan-European associations such as EUR-ACOM (refer to paragraph 11) were also clearly demonstrated in terms of their ability to lobby positively at the national and EU policy level. Community involvement at the local level in regeneration and social projects was also found to be very beneficial to the extent that both the EU and national governments actively promote it.

17. Recent experience of coal industry restructuring outside western Europe is also referred to briefly in the Appendix of the IEACR Report. The Czech Republic's experience is touched upon, illustrating the effects on coal industry communities during the transition from national central planning to a market-based economy. Of the former Eastern Bloc countries, the Czech Republic was one of the first to address the need for coal industry restructuring, particularly in the hard coal sector. In order to provide the opportunity to examine measures undertaken outside Europe, the experience of the privatisation of the Cape Breton Development Corporation's (CBDC) mining interests in Nova Scotia, Canada is also highlighted. However, the events outlined in the report regarding CBDC did not, in fact, materialise; the private-sector buyer pulled out, and the government subsequently shut the coal mines.

IV. EXPERIENCE FROM COAL INDUSTRY RESTRUCTURING GUIDELINES

18. The IEACR report, in conclusion, features a section on "Guidelines", which have been developed by the author arising from his extensive research and analysis of the experience of western European coal industry restructuring, including in terms of those approaches that were successful, those that were not, those approaches and activities that were essential for successful restructuring, etc.

19. Whilst it is recognised that each country's circumstances are unique, there are often common themes or approaches that can be adapted to suit a specific environment or set of conditions that may exist. It is always possible to learn from the experience of others, however, the extent of that learning will vary according to the existing situation.

20. The restructuring or closure of any major industry is inevitably a highly emotive and stressful event for everyone involved. This is true whether it is a large-scale state-run enterprise, a major private-sector company or merely the sole significant source of employment within a community, as is often the case in the mining industry worldwide. The responses of the major players involved – the companies, local communities, local and national governments, trades unions and financial institutions – are fundamental to the success or failure of any such restructuring in terms of securing the social and economic future for the people most affected. Good liaison between them may not guarantee long-term prosperity for the communities involved, but at least it provides the foundation for future economic regeneration. By contrast, poor communication and the lack of an integrated approach to regeneration are key ingredients for long-term economic and social deprivation.

21. The author further highlights that given the restrictions imposed by these gross generalizations, and without wishing to appear either patronising or overly academic to those facing major social and economic upheaval, it is nonetheless possible to establish some basic guidelines that can assist in promoting a successful transition from the old employment order to the new.

22. In view of the importance and potential significance of these "Guidelines" for the transitional economies whose coal industries are currently being or will be restructured, it is intended that they be the subject of discussion at the fifth session of the Ad Hoc Group of Experts. The "Guidelines" are outlined in Annex I.

V. CONCLUSIONS

23. The coal industry restructuring that has taken place in western Europe over the past 50 years provides a wealth of experience for the economies in transition that are currently undergoing or are faced with implementing similar coal industry restructuring programmes.

24. The “Guidelines” provided in the IEACR report ‘Experience from Coal Industry Restructuring’ have been developed following an extensive review and evaluation of the measures undertaken by the authorities in six of the countries most significantly affected by coal industry restructuring in western Europe. By suggesting key aspects for consideration, their aim is to assist decision and policy makers in countries with developing and transitional economies that will or are undergoing similar restructuring of their coal industries.

25. The importance and benefit of community involvement in the affected localities/regions has been clearly highlighted for a range of reasons, including so that the affected communities can be represented by one coherent and, therefore, more effective lobbying ‘voice’. This community involvement is an area that needs to be encouraged and facilitated in the economies in transition, together with the development of ‘community networks’ both (i) between western Europe and the transitional economies and (ii) within the transitional economies themselves to promote the exchange of information and experience. It is recommended that any potential ‘facilitating’ role for the Ad Hoc Group of Experts on Coal and Thermal Power should be the subject of discussion at its fifth session.

26. The importance of the early implementation of successful long-term economic regeneration programmes has also been emphasized as a powerful tool for mitigating the devastating economic, social and environmental impacts of coal industry restructuring.

27. In the event the Ad Hoc Group of Experts finalises the draft questionnaire “Economic and Social Impacts of Restructuring of the Coal Industries of the Transition Economies” (ENERGY/GE.1/2002/6) and agrees to its circulation, the responses will provide an assessment of the status of coal industry restructuring in the transitional economies, and the effectiveness of any measures put in place to mitigate the adverse consequences of restructuring. The responses will also highlight gaps and problems (for example barriers and obstacles to implementing effective economic regeneration programmes) common to the region, as well as those specific to individual countries.

28. It is proposed that a series of regional workshops be organised to address the common problems and obstacles to implementing effective programmes and policies to mitigate the economic, social and environmental impacts of coal industry restructuring in the countries with economies in transition. Issues specific to one particular country or group of countries could also be dealt with at these events. Such workshops could usefully address how to facilitate the foreign investment essential for economic regeneration programmes by highlighting any advantages of the localities, such as human capital, government concessions (e.g. tax breaks), and the potential for increased use of Information and Communication Technology (ICT) to offer a lower cost structure for any new business/SME. This proposal should be the subject of discussion at the fifth session of the Ad Hoc Group of Experts.

29. As background information, a Workshop entitled “The Opportunities for the Development of New Economic Activities in the Coal Mining Regions of the CCEE and CIS” was jointly organised by the then Directorate General for Energy of the European Commission and the ECE Sustainable Energy Division in Brussels in October 1993.

30. In order to undertake and carry forward any meaningful assistance programmes, such as the series of workshops highlighted in the previous paragraph, a prerequisite will be the involvement of external partners and funding to, for example, facilitate the involvement of external consultants/experts; enable the participation of delegates from disadvantaged regions; and meet the organisational costs of the workshops.

31. There is clearly a potential role for the Ad Hoc Group of Experts to assist transitional economies – both decision makers and affected communities – to mitigate the economic, social and environmental impacts of coal industry restructuring. The extent, if any, of that role needs to be the subject of discussion at the fifth session of the Ad Hoc Group.

ANNEX I**GUIDELINES: EXPERIENCE FROM WESTERN EUROPEAN COAL
INDUSTRY RESTRUCTURING**

The following Guidelines⁴ have been developed following a review and evaluation of the different approaches to coal industry restructuring taken by the governments of France, Germany, Netherlands, Spain and United Kingdom.

In terms of overall restructuring strategy:

- (i) Long-term planning of restructuring allows the appropriate alternative employment and new investment promotion infrastructure to be put into place before it is needed. Unless this is done, any existing services will be swamped by the new demands being placed upon them, leading to an unacceptable delay between jobs being lost and new opportunities being created. In addition, new employers are more likely to invest in or relocate to areas that are already economically active, and will need additional incentivisation if economic and social depression has already become established.
- (ii) A high level of communication is needed between all the parties involved. Experience has shown that it is much harder to achieve successful economic regeneration in situations where there is antipathy between the major interested parties, be they trades unions, governments or the companies themselves. It is vital that there is full understanding of the potential problems facing the affected communities, and general agreement as to the best course of action to be taken to minimize the effects of industrial restructuring.
- (iii) In situations where there is consensus, the establishment of a guiding management structure has been shown to offer significant advantages in the day-to-day implementation of regeneration projects.
- (iv) All levels of participation in economic regeneration programmes can benefit through the use of people who have specialist skills in locating and procuring sources of project finance, from the commercial sector, governments and international agencies alike.
- (v) Economic regeneration strategies must address the needs both of the work force that has been directly affected by restructuring, and of the coming generation. These may not be immediately compatible in terms of either aspirations and abilities, since the future workforce has the opportunity to achieve higher skill levels through continued education while the most pressing need for those made redundant is to maintain a living income and meet existing liabilities.

⁴ Source: Walker, S., 2001, *Experience from Coal Industry Restructuring*, IEA Coal Research Report CCC/48, 2001, London.

- (vi) Early retirement has been widely and successfully used as a means of reducing the number of people for whom new work is required. Such a solution has, of course, an implicit long-term liability to support people of working age and ability, as well as changing them from being revenue contributors into social security recipients. There is also the question of the loss of skills that cannot then be passed on to younger workers, while the opportunity remains for people who are officially disqualified from working to participate in the 'grey economy'. Consideration needs to be taken of ways in which older people, who are still of working age, can contribute to economic life in their communities without being penalised financially.
- (vii) Improved education and training are widely seen as being vital components of social and economic regeneration. While in the past, mining communities have often suffered from low levels of achievement in formal education, with subsequent training targeted specifically at the needs of the mining industry, the next generations will require much more comprehensive education – up to tertiary level – in order to be able to participate successfully under future economic conditions.
- (viii) Small- and medium-sized enterprises are widely seen as offering greater employment potential for the economic regeneration of deprived areas than large, capital-intensive companies. Nonetheless, large businesses can offer significant advantages in terms of indirect employment with suppliers, and the analogy can be drawn with commercial shopping developments, where large 'anchor stores' provide an environment within which other businesses can participate successfully.
- (ix) There has to be an appreciation of the change in 'mind-set' that needs to take place on behalf of both employers and employees when people leave a strongly structured working environment, as in a state-controlled industry, for work under free-market conditions. This will inevitably take some time to achieve.

In terms of the communities affected:

- (i) The authorities need publicly to demonstrate a commitment to maintaining economic activity in coalfield areas, and that they are not abandoning them to economic decline. There is thus a need for close liaison between the communities and those responsible for implementing regeneration programmes, so that community requirements are adequately addressed.
- (ii) It is important to recognize the sense of loss – comparable to bereavement – when a major source of employment within a community closes or down-sizes significantly. Allowance needs to be made for this in the short term, although it is also essential for people to be able to look ahead in terms of policy implementation.
- (iii) Communities still need a focus and a sense of identity, even if the former major employer has gone. For this reason, environmental regeneration that incorporates some features of the old industry, as well as using recognized community facilities, is important so that the communities can make the transition to the future social and economic structure while still being able to relate to the environment in which many will have spent all their lives.

- (iv) Community services need support from government at all levels in order to maintain continuity for the residents involved. This may include the need for additional financial support for social facilities, such as libraries, schools and clinics, as well as higher subsidies for public transport. This is especially true where responsibility for the operation of social facilities has been transferred from the mining company to the local authorities. Consideration also needs to be given to reducing local business taxation on community shops so that these can continue to provide essential services to residents during the economic regeneration process.
- (v) An early appreciation has to be gained of the housing requirements in affected communities, especially where conditions of employment have included free or subsidised housing for coal industry workers. On-going maintenance requirements need to be assessed, together with the costs involved in bringing inadequate housing stock up to acceptable standards.
- (vi) Support is also needed for the establishment and maintenance of 'self-help', or community-based organizations that can provide essential services to local people. While these are often staffed by volunteers, they can play a useful role in maintaining a sense of community, as well as providing a means for people to gain new skills with which they can re-enter the employment market.
- (vii) If there is no likelihood of new employment being attracted to geographically remote communities in which coal mining has ceased, it may be better for the authorities to budget for resettlement of the inhabitants, rather than providing long-term support for services for a naturally diminishing population.

In terms of the individual:

- (i) People affected by industrial restructuring need individual support from organizations that they feel that they can trust: this may not be their former employer if restructuring has taken place under conditions of social conflict.
- (ii) Retraining has to be appropriate to the needs of potential future employers, who ideally should be involved in the training process, even if this is funded by government.
- (iii) Advice on job searching, training and skills requirements has to be provided on an individual basis. Those affected by industrial restructuring need to be encouraged to make use of such services, especially in situations where there has been poor acceptance of the need for restructuring.
- (iv) Independent financial advice is also essential, especially where lump-sum payments in compensation for redundancy are involved.
- (v) Some form of transitional income support may be necessary, in particular where former miners have to take lower-paid work.

- (vi) It is unrealistic to expect most 'traditional' industrial workers, such as coal miners, to have the entrepreneurial skills necessary to become successful in self-employment, although this has often been promoted as a key means of providing alternative employment.

In terms of cost implications: there is no cheap way to restructure or close a long-established industrial sector. The responsible authorities need to make adequate budget provision for:

- ❑ The physical restructuring or closure process;
- ❑ Site environmental rehabilitation;
- ❑ The construction of new infrastructure and commercial facilities;
- ❑ The attraction of new employment through promotion and the provision of fiscal incentives;
- ❑ Assistance to former employees who remain in the work market with job searching and training;
- ❑ Improved education facilities for young people and those with special needs;
- ❑ Long-term financial support for those taking early retirement;
- ❑ Social security benefits for the unemployed or medically incapacitated;
- ❑ Long-term pension support for the retired; *and*
- ❑ Continuing support for community-based services.

Fifty years of experience in Western Europe have demonstrated that it is possible for former coal mining districts to recover from the trauma of major job losses, and to re-establish a viable economic base. To do so requires a concerted, long-term effort on the part of everyone involved. As IMCL⁵ (1989) states, 'It is important to appreciate that industrial restructuring does not imply purely negative consequences for society, but with the appropriate policies and positive commitment and resources, may lead to the renewal of individual skills and career prospects, and the regeneration of coalfield communities and regions'.

⁵ International Mining Consultants Ltd.