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European Spatial Research and Policy

'The European Coal Industry and the Green Paper: A New Deal'

Le charbon en Europe et la nouvelle donne du “Livre vert”

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Abstract:

Today, the issue of coal in Europe is renewed for institutional, environmental and economic reasons. The aim of this article is to study the European policy and its consequences on territories. The first chapter examines the evolution of the European policy, from the coal crisis in 1958 to the council regulation in 2002. The second chapter deals with the national policy of the coal states, putting in evidence their specificity. The conclusion underlines the relative independence of the states vis-à-vis Community trends and opens the debate on the problem of black countries in the new Member States, Poland in particular.

Résumé:

La problématique du charbon en Europe est aujourd'hui renouvelée pour des raisons institutionnelles, environnementales et économiques. Le but de l'article est d'étudier les orientations politiques de l'Union et leurs conséquences sur les territoires. La première partie examine l'évolution des positions européennes depuis la crise charbonnière de 1958 au nouveau règlement de 2002. La deuxième partie étudie les politiques nationales des Etats charbonniers en mettant en évidence leurs spécificités. La conclusion souligne la relative indépendance des Etats vis-à-vis des textes communautaires et ouvre la réflexion sur la question des bassins houillers dans les nouveaux Etats membres, Pologne en particulier.

Introduction

Coal-mining has occupied a central and singular place in the economic and social history of Europe, its landscapes and culture. From Asturias to Silesia, from South Wales to Wallonia, from the Nord-Pas-de-Calais to Provence, these coalfields, spawned by the industrial revolution, are a characteristic feature of the European Continent and the starting point for the process of European Union (Leboutte, 1997). These “black countries”, which for the most part are well on the road to decline¹, pose a variety of problems to do with the reconversion and restructuring of space (Berkner, 1999; Deshaies, 2001). Certain installations are now listed as national heritage sites and have become as many symbols of bygone times (Raistrick, 1973; Daumas, 1980).

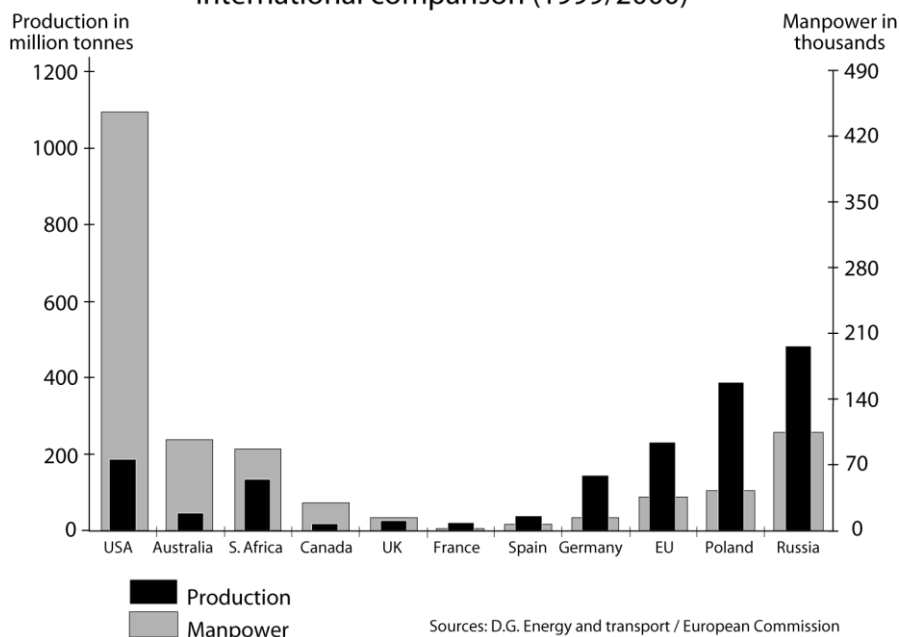
¹ Mainly, in Western Europe since the 1960s and in Central and Eastern Europe since the 1990s.

Nevertheless, the problem of coal in Europe has once again come to the fore, for reasons of an institutional, environmental and economic nature: the challenge of climate change has involved Europe in the Kyoto Protocol since December 11th 1997; the ECSC Treaty expired on July 23rd 2002; the enlargement of May 1st 2004 made Poland the main coal-producing state of the Union, accounting for half of its overall coal production; and, lastly, there has been a notable rise in the cost of raw materials and energy in the year 2004. This new situation poses the problem of the Union's policy choices and their consequences on the coal-producing regions. The aim of this article is, therefore, firstly to look at the changes in European policy positions and then to assess their territorial impact, taking into account a variety of energy requirements and domestic policies. In other words, has European integration helped domestic energy policies converge, thereby forging a common destiny for the different European coal regions?

1 - European policy positions and their evolution

The 'end of coal' in Europe is a familiar refrain, but in other parts of the world coal-mining continues unabated, often in open-cast mines at production levels much higher than those of the Old Continent (**Fig.1**). Among the countries of the fifteen member-Union, only the United Kingdom can produce coal at market-price thanks to its open-cast mining, while in Spain and Germany a ton of coal costs three times as much. The price of the last tons of coal extracted in France was four times higher than the market rate, before the last pit-head closed in Lorraine in May 2004. Among the new countries of the enlarged European Union, productivity is also very low, despite a drastic reduction in manpower, including the loss of some 160,000 miners in Poland during the 1990s. If Europe "saved" its iron and steel industry (Mioche, 2001), which has since recovered its competitiveness, the same was patently not true of the coal industry. Could it be for so-called "natural reasons" to do with the cost of working underground? Probably, but not exclusively. The divergence in the contrasting destinies of iron and steel production on one hand, and coal on the other, is part of a long-term historical process, starting with the foundation of the ECSC in 1951 and drawing to a close virtually with the expiry of the afore-mentioned Treaty on July 23rd 2002.

Fig.1 - Coal production and manpower: international comparison (1999/2000)



The “anti-crisis” mechanisms under scrutiny

At the end of the fifties (Jörnmark, 1993), while coal accumulated at the pit-head during the oil price-offensive, the High Authority² failed to proclaim a state of “manifest crisis”. The High Authority never once used its supranational powers: “*member-states chose to ignore the facts rather than allow the planned procedures to be used*” (De Carmoy, Brondel, 1991). In the face of the continuing decline of coal-mining, a member of the Consultative Committee suggested sarcastically during a meeting held in December 1965 “*that the term ‘Coal’ should be removed from the European Coal and Steel Community*” (Balidan, 1999). It was not until July 1973, during the oil crisis, that the first anti-crisis mechanisms appeared within the framework of the Energy Community³. A consultative body was founded to coordinate the measures taken in each state. From that point on, the Community defined targets to reduce its dependence on oil. During the 1980s, other priorities emerged such as environmental protection and research development. However, the Commission for Energy, Research and Technology of the European Parliament has denounced⁴ the imbalance in resources assigned to coal and to non-polluting energy compared to nuclear energy, to which two thirds of energy research budgets are devoted.

Subsidies for coal production increasingly contested

The adoption of the Single European Act in 1986 marked the beginning of a new phase. Subsidies for coal production were approved by the Council, up until the end of 1993, date of the introduction of the Single Market. They were accepted to the extent that “*they are made for insuring the survival of domestic production in the teeth of competition from oil or coal imports from non- European countries: they do not therefore distort exchanges between Member States*”⁵. But from 1992 onwards, the Commission tried to calculate the anticipated economic benefits of the unified market. In a report entitled “*1992 or the New European Economy*”, the Commission estimated that, where coal was concerned, the suppression of direct state subsidies on production would save 3.3 billion ecus⁶.

When it came to the Maastricht Treaty, the decision of December 28th 1993⁷, which remained in force till July 23rd 2002, considered that “*most coal production in the Community remains uncompetitive (...) the upward trend in the amount of aid paid in recent years is incompatible with the exceptional, transitional nature of the Community aid arrangements.*” That is why the subsidies needed to be on a sliding-scale. Consequently:

“efforts to reduce production costs must form part of a restructuring, rationalization and modernization plan for the industry distinguishing between production units capable of contributing towards attainment of this objective and units which cannot attain it; whereas the latter will have to be the subject of an

² The executive body of ECSC

³ The state of “manifest crisis” was decreed, on the other hand, during the Iron and Steel Industry crisis from 1980-88.

⁴ Session document, 1989.

⁵ De Carmoy, Brondel, p.73.

⁶ Op. Cit., p.77.

⁷ Commission Decision n°3632/93/ECSC establishing community rules for state aid to the coal industry.

activity-reduction plan leading to the closure of installations when the present arrangements expire; whereas only exceptional social and regional reasons can justify any postponement of closure beyond the expiry date set”.

This decision appears to be a kind of “convergence criterion”, designed to coordinate the closure of the majority of European coalfields on expiration of the ECSC Treaty, on the basis of financial considerations attenuated by the principle of “economic and social cohesion”.

The Green Paper: a new deal?

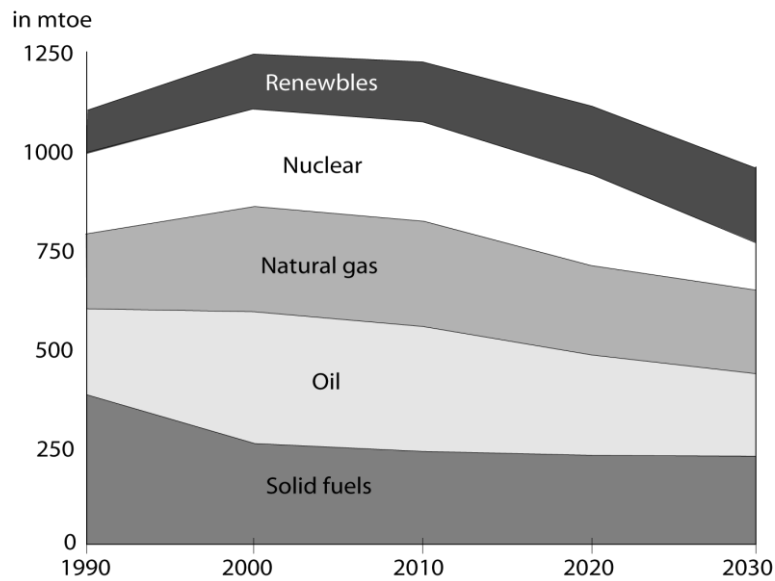
Some nine years later, on July 23rd 2002 to be precise, a new regulation was issued⁸, which is due to remain in force until 2010. While maintaining the objective of reducing subsidies, this new regulation shows a more flexible approach, introducing new parameters:

“The world political situation brings an entirely new dimension to the assessment of geopolitical and security risks in the energy sector, and gives a wider meaning to the concept of security of supplies (...) As indicated in the Green paper..., it is therefore necessary, on the basis of current energy situation, to take measures which will make it possible to guarantee access to coal reserves and hence a potential availability of Community coal (...) The Commission Green Paper on a European strategy for the security of energy supply acknowledges the importance of coal as an indigenous source of energy... Strengthening the Union's energy security, which underpins the general precautionary principle, therefore justifies the maintenance of coal-producing capability supported by State aid (...) A minimum level of coal production, together with other measures, in particular to promote renewable energy sources, will help to maintain a proportion of indigenous primary energy sources (...) A minimum level of production of subsidised coal will also help to maintain the prominent position of European mining and clean coal technology, enabling it in particular to be transferred to the major coal-producing areas outside the Union”.

The end of coal-mining in Europe thus appears to have been postponed. At least, Europe has given itself more time, the option of not completely closing pits and galleries, and an opportunity to valorise a know-how which it was on the verge of giving up. Did this happen out of the blue or was it due to sudden change in fortune? It is doubtless too early to say. But the ineluctable logic of costs, which prevailed from the mid-eighties to the end of the nineties, is no longer the sole argument at the Community's disposal. The need to limit energy dependency and the opportunity of developing technology for clean-burning coal, together suggest that European production of solid fuels will reach an estimated 250 million tons by 2030 (**Fig 2**).

⁸ Council regulation (EC) n°1407/2002 on State aid to the coal industry.

Fig.2 - Energy production:
present situation and projection

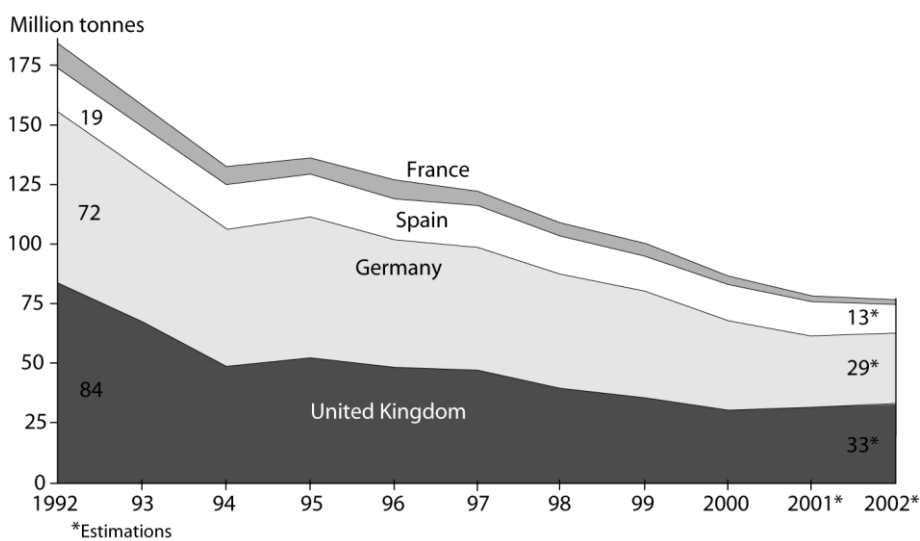


Sources: D.G. Energy and transport / European Commission

2 – National coal policies: changes and consequences

Beside the community texts, the second phase in the approach proposed here involves examining their application on the ground at the national level⁹. In the early 1980s, the strategies of the main coalmining states differed markedly according to their domestic political and energy contexts. Twenty years on have Community guidelines really produced convergence? The geography of the Union during that period requires case studies of the major European countries: the United Kingdom, Germany, Spain and France (Fig 3- 4).

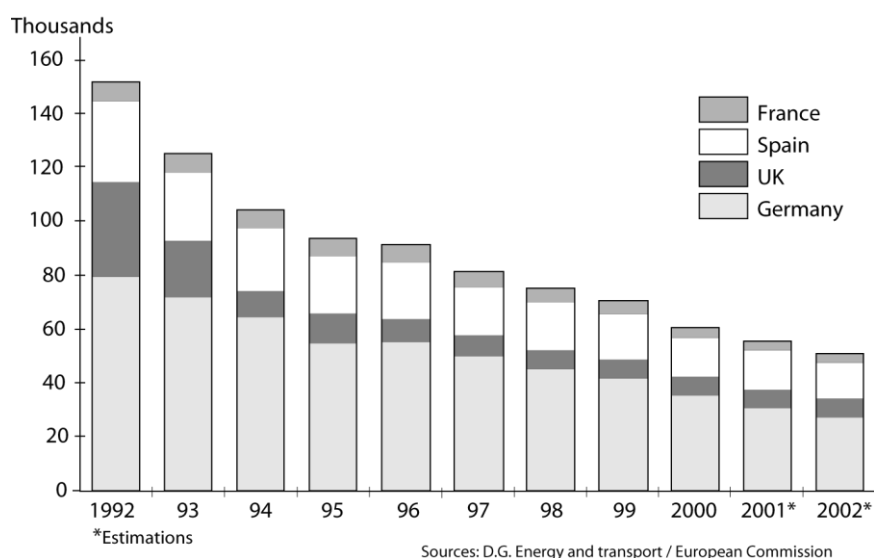
Fig.3 - Trend in hard coal production 1992-2002*



Sources: D.G. Energy and transport / European Commission

⁹ Report of the Commission on the application of the Community rules for State aid to the coal industry in 2001, 02.07.2002, 18 p.

Fig.4 - Trend in underground employment 1992-2002*



The United Kingdom

During the 1980s, Mrs Thatcher's United Kingdom government adopted an essentially economic approach to coal, while relying on the godsend of North Sea oil. The drastic restructuring programme decided in 1983, which led to the suppression of 50,000 jobs and the closure of around 50 pit-heads, ended up with a memorable strike of the miners' unions from March 1984 to March 1985 and affected the livelihood of numerous coalmining communities (Beyon, Hudson, Sadler, 1991). The Tory government's hard line never wavered. The stakes, as we know, were as much ideological as economic. Those dark years for the miners have provided the social substance for some of the finest films in the history of the British Cinema¹⁰. In 1994, the privatisation of the British Coal Corporation was accompanied by a new and drastic wave of restructuring. In 2001, however, at the end of this painful mutation, the United Kingdom produced 32 million tons of coal – through private companies and without subsidies – for a workforce of 12,700, leaving it in first place among the 15-member Union. Twenty years of neo-liberal logic in the domestic framework to a certain extent “saved” the most promising coalfields.

Germany

On the contrary, West Germany, which has the biggest reserves of the Community, has long committed itself to the defence of its coal industry, and coal was the corner-stone of one of the most powerful industrial regions in Europe: the Ruhr (Abelhauser, 1984; Holz, 1977, 1992). Its protection system was based on outlet guaranties, through long-term contracts with steel and electricity companies. But the high cost of German coal became harder to accept for the community when the *'kohlpfennig'* (the special tax on consumer electricity) rose to 7.5 % in 1982. The measure had been duly authorised by the European Community, since it did not obstruct the free circulation of coal. But, subsequently, it became a controversial issue, to the extent that it was an obstacle

¹⁰ For instance, 'Brassed Off' by Mark Herrmann.

to German imports of much cheaper nuclear-generated electricity. A restructuring programme was finally adopted in 1988, on the eve of the fall of the Berlin Wall. In 1997, a *Kohlenkompromiss* was signed between the government, the two Länder in question¹¹, the labour unions and the producers, which announced a reduction in subsidies and set a lower production target of around 26 million tons for a work-force of 36,000 in 2005. In 2002, production costs were 2.5 times higher than the market price. The Commission report stipulated that Germany, like Spain, “*have not taken a final decision and are adopting a more cautious approach, those two countries are also making substantial restructuring efforts dictated by social and regional concerns rather than any kind of realistic prospect of their coal industry achieving economic equilibrium*”¹². In the end, Germany did not rush to apply the 1993 Community decision. It remains, despite noteworthy contradictions, relatively loyal to the principles of *sozialmarktwirtschaft* and a conception of the industry as a planning tool.

Spain

To reduce its high degree of dependency, the Spanish national energy plan of 1979 planned to increase recourse to nuclear power, coal and gas. But after the nuclear moratorium was voted in 1982, the government of José Maria Aznar decided to sideline coal and put more emphasis on gas. The arrival of Algerian gas by the Maghreb-Europe gas pipeline, inaugurated in 1996, should accelerate the use of this combustible by industry and consumers alike, to the detriment of oil or coal. Since 1998, Spain has been engaged in a new plan for the modernisation, rationalisation, and restructuring of the coal industry, affecting in particular the Asturias basin (Benito del Pozo, 1992). Coal-mining is distributed among several small basins – enclaves which are highly dependent on the coal industry – making the conditions of reconversion and reindustrialisation difficult. Production is moreover spread out among some forty companies, mostly private, with the exception of Hunosa¹³. Only eight of these produce more than one million tons of coal annually. Domestic production amounted to 14 million tons per annum for a work-force of 14,000 at the end of 2002. Despite difficult geographical and industrial conditions, Spain has striven to maintain a level of production higher than that of France, which has now stopped all coal-mining activity.

France

France, whose coal-mining resources have always been economically and territorially limited, has played the nuclear card since the 1970s. The idea that the decline in coal-mining is an unstoppable and terminal process is, perhaps, an *a posteriori* construction. In reality, the narrative of the process is strewn with phases and discourses which, from basin to basin, have encouraged illusory hopes among miners and their unions. The Socialist government’s revival of the coal industry in 1981 came in, of course, for severe criticism some years later. But put in context it seems far from unreasonable: between 1978 and 1981, the price index for oil products rose from 100 to 155; it was only after the peak of 1981 that prices progressively fell back to their original 1978 level of 100 in 1986. Besides,

¹¹ Nordrhein-Westfalen, Saarland.

¹² Op. cit.

¹³ HUNOSA: Hulleras del Nordte Sociedad Anonima.

through a Council resolution of September 1974, the Community's member states promised, among other things, "to reinforce the security of supply by using domestic resources".

1984 was a turning point for the economic and social policy of the government, and in the case of coal a year which was marked by the Hug plan (Daviet, 1990, 1993). France sought to cast its approach as a middle way between the British neo-liberal and German social democratic ideologies (Charbonnages de France, 1989). As a result, efforts were concentrated on the most promising coalfields. But the future of the CDF¹⁴ was not called in question. On the contrary, its Director General encouraged workers to "be enterprise-minded", with a view to becoming "a profit-making industrial enterprise". The guiding concern was no longer to produce ("we must stop producing for the sake of it, accumulating costly stocks"), but to sell; not a mineral as such, but heat-energy. It was a clarion call to ensure the survival of the industry. The idea underlying the call was that if efforts were made, if attitudes changed, the company could make coal viable. The company's future was so-to-speak in the hands of the workers. Two years later, the collapse in prices following the oil 'counter-shock' and the depreciation of the dollar led CDF to put new impetus into the restructuration process. The closure of the Nord-Pas-de-Calais coal-field and of several sites in the Centre Midi was duly announced. But the Lorraine and Gardanne basins, which have "growth potential", were preserved by an industrial and commercial plan devised to restore financial stability.

As the years went by, policy declarations and aims changed. Whereas in Lorraine there were plans to suppress 2,000 jobs a year by 1988, the prospects for closure in 2005 were evoked as early as the end of the 1980s. It was as though France was moving to anticipate the Community's requirements of 1993. It is true that production costs in France were four times higher than market prices during that period. The end of coal-mining in France officially began in 1994 with the "Coal Pact" and was implemented without any redundancies. But *Mineurs de France*¹⁵ continued to publish upbeat headlines in the following months: "Coal Agreement, An Opportunity To Build The Future"; "Our Group And Its Future", "New Momentum for the Workforce, The Company's Future Secure", "Corporate Plan: Our Future Is In Our Hands", "Coal, Today And Tomorrow"... Admittedly, there were still resources in skills and know-how asking to be developed. For the Chairman of the group this was "the last battle for coal", which meant that engineering and research activities would be continued after closure. While it is clear that no one had any stomach left for the fight, his declaration held out the enticing prospect of an exterritorial sector (Daviet: 2003), which posed as many cultural as geographical problems. France has no oil, but owns an oil industry. It is, however, for historical reasons, hard to imagine a coal sector without coal-mines.

¹⁴ CDF: Charbonnages de France.

¹⁵ In its Centre-Midi edition: taken from various issues between July-August 1994 and November 1995.

Conclusion

On the expiry of the ECSC Treaty, nobody could really point to an uniformisation of national situations and strategies arising from the application of “the European norms” of 1993. Despite common constraints, the energy configurations and political circumstances of producer-countries have maintained a degree of specificity. The states have adopted different positions, determined by a relative independence towards Community injunctions. For France, the die is cast: measures to “*guarantee access to coal reserves*”, according to the new terms of the 2002 regulation, have not been taken and the land-filling of mines has started, notably at Gardanne. The United Kingdom and Germany are continuing mining under very different conditions, but are better placed to conform to the minimum expectations laid down by the Green Paper and the policy orientations of the European Commission. The new post-enlargement European member states, Poland and the Czech Republic in particular, are subject to two kinds of change: the first related to economies in transition, the second broadly-speaking arising from the crisis in the black countries. Poland’s reform of its coal industry (1998-2002) was followed by the introduction of a new programme (2003-2006) “*using the anti-crisis laws and powers to close down certain mines*”. But the decision to close down the new *Kompania Weglowa SA* continues to be opposed by the unions. The Green Paper’s new deal and the Union’s regional policy should help Silesia to dampen the impact of these changes.

Nevertheless, the problem of coal in Europe cannot be confined to the independence of – or even dialectical interrelation between – Community authorities and member-states. From the desire to conform to market laws; the need to preserve the economic and social cohesion of the coal regions; to the imperatives of “sustainable development”; the energy question is not one that is easily resolved.

In social terms¹⁶, the impact of the ECSC has been far from insignificant, if we take into account the *readaptation* subsidies (Strasser: 1976). To these must be added the more recent structural funds as part of the regional policy towards basins which are mostly situated within the eligible perimeters of *Objective 2*¹⁷. Beyond a profit-and-loss account of state aid, a further point must be underlined: “*Even if the overall record of European social policy can appear short on results, the ECSC and its consultative commission practised a new form of social dialogue, which certain protagonists openly identify with (Biondo: 1998)*”¹⁸. Following the expiry of the Treaty, the European Economic and Social Committee was chosen to take over the mission of the former Consultative Committee, within the framework of a Consultative Committee for Industrial Mutations (CCIM), based on extending expertise gained in the coal and steel fields to other sectors¹⁹. This Committee has been operational since 2002 and notably undertook a mission to Katowice in 2004.

¹⁶ It has to be said that the objective of economic and social cohesion was substantially incorporated in the Treaty of Paris and in the Preamble to the Treaty of Rome, before it became an explicit feature of the Single Act.

¹⁷ In the course of programming for 1989-1993, 1994-1999, 2000-2006.

¹⁸ Mioche, op. cit.

¹⁹ COM (2000) 588 final.

From an environmental point of view, the questions asked by the Green Paper are not really new and recall, to some extent, the debate over the work of the Rome Club, which had far-reaching effects during the 1970 oil crisis. In spite of the geopolitical nature of the crisis, most of the developed world came to recognise the finite nature of the planet and its fossil fuel resources. However, the need to save energy and to develop renewable resources was soon forgotten with the oil ‘counter-shock’ in the 1980s and the fall in the dollar. Even if the attractive concept of “sustainable development” (Vivien, 2003) raises a swathe of relevant questions about industrial society and its model of production and consumption, it is also subject to a variety of interpretations according to the protagonists and periods concerned. It has given rise therefore to keen debate and new formulas, such as “sustainable degrowth” or “sober growth” (Latouche, 2003). Without entering this arena, the little Green Paper²⁰ sets out to propose a strategy based on restraining demand, in contrast to the United States, which seeks to satisfy demand by increasing supply.

References

ABELSHAUSER, W. (1984), *Der Ruhrkohlenbergbau seit 1945: Wiederaubau, Krise, Anpassung*, München.

BALDAN, T. (1999), *Naissance du dialogue social en Europe? Etude du comité consultatif de la CECA*, Maîtrise d’histoire contemporaine de l’Université de Provence, Aix-en-Provence.

BEYNON, H., HUDSON, R., SADLER, D. (1991), *A tale of two industries, The contraction of coal and steel in the North East of England*, Open University Press.

BENITO DEL POZO, P. (1992), *El espacio industrial en Asturias*, Principado de Asturias.

BERKNER, A. (1999), "Wasser und Landschaft im Mitteldeutschen Braunkohlenrevier-Verlegungs-lösungen oder zukunfts-fähige Synthesen", *Wasser und Landschaft*, Leipzig, Strasse der Braunkohle.

BIONDO, S. (1998), « Towards the expiry date of the ECSC: the workers’ trade unions’ viewpoint », in RANIERI, R., GIBELLIERI, E. (eds), *The Steel industry in the new millennium*, Vol. 2: Institutions, Privatisation and Social Dimensions, London, IOM Communications Ltd: 291 - 296.

COMMUNAUTES EUROPEENNES (1989), *Parlement européen, documents de séance*. Rapport de la commission de l’énergie de la recherche et de la technologie sur la politique européenne du charbon.

COMMISSION OF THE EUROPEAN COMMUNITIES (2002), *Communication from the Commission to the Council and the Parliament: Final report on the Green Paper "Towards a European strategy for the security of energy supply"*.

²⁰ COM (2002) 321 final: Final report on the Green Paper “Towards a European strategy for the security of energy supply”, p. 3.

COMMISSION OF THE EUROPEAN COMMUNITIES (2002), *Report from the Commission on the application of the Community rules for state aid to the coal industry in 2001*.

COMMISSION OF THE EUROPEAN COMMUNITIES (2002), "Council Regulation (EC) No 1407/2002 of 23 July 2002 on State aid to the coal industry", *Official Journal L 205, 02/08/2002 P. 0001 – 0008*.

COMMISSION OF THE EUROPEAN COMMUNITIES (1993), "Commission Decision No 3632/93/ECSC of 28 December 1993 establishing Community rules for State aid to the coal industry", *Official Journal L 329, 30/12/1993 P. 0012 – 0018*.

DAUMAS, M. (1980), *L'archéologie industrielle en France*, Paris, Laffont.

DAVIET, S. (2003), *Industrie, culture, territoire*, Habilitation à Diriger des Recherches, Université de Provence, Aix-en-Provence.

DAVIET, S. (1993), «Bassin Houiller Lorrain, une reconversion en question », in *l'Information géographique*, Paris, A.Colin, n° 57: 194-196.

DAVIET, S. (1990), *Le bassin houiller lorrain et son espace frontalier, l'évolution d'une région en voie de reconversion*, thèse de géographie, Université de Provence, Aix-en-Provence.

DE CARMOY, G., BRONDEL, G. (1991), *l'Europe de l'énergie*, Commission des Communautés européennes.

DESHAIES, M., (2001), "La réhabilitation des paysages de l'ancienne région minière du rebord oriental du Harz (Saxe-Anhalt)", Nancy, *Revue géographique de l'Est*, 1-2: 7-15

HOLZ, J.M. (1992), *Gérer l'espace, l'action des collectivités territoriales dans la Ruhr*, Perpignan, PUP.

HOLZ, J.M. (1977), *La Ruhr, du "Kohlenpott" à la région urbaine*, Paris, Bordas.

JÖRNMARK, J. (1993), *Coal and Steel in Western Europe 1945-1993*, Göteborg.

LATOCHE, S. (2003), « L'imposture du développement durable ou les habits neufs du développement », in *Mondes en développement*, De Boek, Bruxelles, n°121 : 23-30

LEBOUTTE, R. (1997), *Vie et mort des bassins industriels en Europe, 1750-2000*, Paris, L'Harmattan.

MIOCHE, Ph. (2001), « Bilan économique et social de la CECA : un passé qui a préparé l'avenir », in BITSCH, M.T., *Le couple France-Allemagne et les institutions européennes. Une postérité pour le Plan Schuman ?*, Bruxelles, Et. E. Bruylant : 62-79.

RAISTRICK, A. (1973), *Industrial Archaeology*, Paladin, London.

STRASSER, D. (1976), « Histoire budgétaire des communautés européennes expliquée en chiffres. Première partie: histoire budgétaire de la CECA », *Revue du marché commun*, n° 202 : 551-561.

VIVIEN, F-D. (2003), « Jalons pour une histoire du développement durable », in *Mondes en développement*, De Boek, Bruxelles, n° 121 : 1-24.