

(2) The Council and the European Parliament shall give their views on such proposals within two years of their submission.

Article 28 concerns developments after the implementation of the Directive:

The Commission shall review the application of this Directive and submit a report on the experience gained on the functioning of the internal market in natural gas and the implementation of the general rules mentioned in Article 3 in order to allow the Council and the European Parliament, in the light of experience gained, to consider, in due time, the possibility of provisions on further improving the internal market in natural gas, which would be effective 10 years after the entry into force of the Directive.

Article 29 concerns the timetable for bringing the Directive into force:

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive no later than 2 years from the date specified in Article 30. They shall forthwith inform the Commission thereof.

When Member States adopt these provisions, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by the Member States.

Article 30 states that 'This Directive shall enter into force on the 20th day following that of its publication in the Official Journal of the European Communities'.

There is also an Appendix to the Directive containing 'Statements in the Council's Minutes' in which the Commission and individual member states made their own attempt to clarify specific points in respect of individual Articles in the Directive. Here we make reference to only a few of these statements.

Re: Articles 8(2) and 11(2): The Council and the Commission state that the provisions of Articles 8(2) and 11(2) shall not imply any duty on undertakings to change their legal structure or create new companies.

Re: Article 18: The Council and the Commission consider that, since Member States are allowed to decide on a more extensive opening of the market, the concept of site may also apply, if a Member State so chooses, where firms belonging to the same industrial group or consumers forming a consortium or coming from the same industrial zone conclude natural gas supply contracts which in aggregate exceed the eligibility thresholds laid down in Article 18(2) and (6).

The Council and the Commission consider that other final customers consuming less than 25 million cubic metres of gas per year on a consumption-site basis but having a gas fired power production unit and/or a combined heat and power installation are only to be eligible for the volume of gas required for this power and/or heat and power production.

Chapter 5

National Institutional Developments: Competition and Liberalization Experiences

This chapter reviews the beginning of liberalization and regulation experiments in Europe. It begins with the most advanced of these experiments in Britain and then looks at a number of national developments in both importing and exporting countries. The theme of these experiences is not simply the focus of this study – competition and liberalization – but the wider context of institutional change which is permeating the industry throughout the Continent.

Britain: regulation-driven competition and liberalization¹

The development of competition, liberalization and regulation

Box 5.1 summarizes a complex history of competition in the British gas industry in four phases. During Phase 1, 1982–88, despite the passage of legislation and regulation, and the creation of a regulatory Office of Gas Supply (Ofgas) there was little change in BG's monopoly/monopsony position. Phase 2, 1988–94, saw a determined effort by the government and regulatory authorities (Ofgas, the Office of Fair Trading and the Monopolies and Mergers Commission) to 'manage' competition into existence by a series of regulatory measures designed to bring new entrants into the gas market.² This was achieved by forcing BG into the following sequence of measures:

This section draws heavily on the author's article, 'The British gas market ten years after privatization: a model or a warning for the rest of Europe?', *Energy Policy*, March 1997, pp. 387–92. It is important to stress that all of the competition and liberalization developments described here have occurred in the 'British' gas market, rather than 'UK', which includes Northern Ireland, a region which – with its emerging and monopolistic gas market – will probably have to seek a derogation under the EU Gas Directive.

¹ M. Parker and J. Surrey, *UK Gas Policy: Regulated Monopoly or Managed Competition?*, FT/EEP Special Report No. 2, 1994, Science Policy Research Unit, University of Sussex.

Box 5.1: The evolution of competition and liberalization in Britain: four major phases

Phase 1. 1982–88: Monopoly and monopoly

- 1982 Oil and Gas Enterprise Act creates the possibility for competition
- 1986 Gas Act privatizes British Gas (BG) and creates the regulatory office (OFGAS)

Phase 2. 1988–94: Managed competition

- 1988 Monopolies and Mergers Commission (MMC) report forces BG to publish price schedules
- 1990 First contract for transportation signed (Quadrant Gas)
- 1991 Office of Fair Trading (OFT) report forces reduction of BG's market share in industrial market and expands the competitive sector
- 1992 'Release gas' programme commences
- 1993 MMC report recommends: demerging of BG's trading activities from transportation; delaying competition in the residential market until after 2000. Government rejects MMC recommendations.
- 1993 BG's share of the non-residential market falls to 70%

Phase 3. 1994–present: Self-sustaining competition

- late 1994/early 1995 surplus of supply over demand, spot market evolves
- April 1995 sharp price reductions/distress sales
- 1995 suppliers/shippers in substantial commercial difficulty
- 1995 BG's share of the non-residential market falls to 35%, causing substantial 'take or pay' problems. Obligation to price according to schedules suspended
- 1997 (February) BG 'demerges' into two companies: Centrica (British Gas Trading), and BG plc (exploration and production, British Gas transportation and international activities)
- 1997 (June) Monopolies and Mergers Commission Report recommends new regime for transportation tariffs with separate storage tariffs

Phase 4. 1996–98: Evolving competition in the residential market

- 1996 (April) first 'trial area' opened to competition
- 1997 further 'trial areas' opened
- 1998 remainder of the residential market to be opened in stages by June 1998

- publishing schedules for industrial gas prices (from which the company was not allowed to deviate);
- 'releasing' to new entrants some of the gas which it had purchased under long-term contracts.

expanding the competitive sector of the market such that only residential and small commercial customers remained within the BG monopoly, while restricting BG's share of the contestable market to 55%.

During 1994 (Phase 3) self-sustaining competition took hold and the market no longer needed managing as BG's share fell extremely rapidly. At the same time, a surplus of gas supply developed and prices fell sharply. BG was locked into long-term 'take or pay' contracts at higher prices and began to experience serious financial problems. In early 1996 it was announced that the company would be 'demerged' into a trading business (renamed 'Centrica'), and a transportation, exploration and international business (renamed BG plc), and this was achieved in February 1997.³ In June 1997 a new charging regime for transportation and storage tariffs was decided by the Monopolies and Mergers Commission (MMC), after BG had refused to accept Ofgas' proposals. The final phase of competition (Phase 4), opening up the residential gas market, commenced in April 1996, with the first 'trial area'. After the first year of the trial around 20% of customers had changed to other suppliers. It is planned that additional areas of the residential market be opened up such that by June 1998, the entire market will be open to competition.⁴

Stepping aside from the detail of this story, three groups of issues are critical to any appreciation of why the British system has evolved in this way: the changing context of government policy, the growing importance of regulation, and the impact on major players.

The context of government policy

One of the most interesting aspects of the original privatization of the British Gas Corporation was the government's stubborn insistence that

³ Aside from its gas trading business (which in Britain trades under the name of British Gas) Centrica also owns the Morecambe Bay gas fields, a very significant resource base from which to serve its customers. BG plc (which outside Britain trades under the name of British Gas) has significant exploration properties on the UKCS and around the world. Both companies have capacity rights in the Interconnector pipeline.

⁴ Further extension of competition, a consultation document, Ofgas, July 1997.

competition would emerge despite the universally held view (even by the government's supporters) that it would not. Few observers believed that successive governments would subsequently have the determination to enforce competition by their own actions, and via the regulator, especially since this required overturning the entire policy context of privatization. Even fewer could have expected that such action would be met by ineffective protests from BG's management and shareholders, as the competition framework which had been set out in the privatization prospectus was virtually torn up.⁵ This change in the policy context was marked by:

- an extremely rapid timetable for the preparation and passing of legislation, regulation and other key policy instruments. This rapid timetable required the 'railroading' of measures through the legislative process, with severe restrictions on discussion, even within parliament;⁶
- a complete reversal in the culture of providing certainty of decision-making. The traditional policy context in which all circumstances – however extreme – would be covered by a combination of gas industry and government measures and contingency plans, rapidly vanished. The government largely abdicated responsibility as the industry embarked on a 'voyage of discovery' with little certainty as to its eventual destination;

⁵ The only note in the privatization prospectus was that the company would be subject to normal competition law (including review by the MMC). By December 1992 – barely six years after privatization – Ofgas stated that, 'We believe that the terms of the offer for sale ceased to have any moral or legal standing several years ago'. G. McGregor, *Separation of British Gas' Transportation and Storage Business* (London: Ofgas, 1992), p. 15.

⁶ This process began with the original 1986 legislation where the Select Committee responsible for inquiring into the regulation of the industry found itself forced to read the detail in the *Financial Times* newspaper, because the official documents were produced at such a late stage (*Regulation of the Gas Industry First Report of the Energy Committee*, Session 1985/6 HC15, London: HMSO, 1986, p. 32). Another example of this haste was the government's response to the 1993 Monopolies and Mergers Commission Report – a 1,000-page document and the most wide-ranging regulatory inquiry into a privatized utility yet seen, which had taken more than a year to prepare. The Department of Trade and Industry published its response in a 6-page press release issued two days before the Christmas holiday. This was the only document issued to explain that the government was rejecting the main MMC proposals and had decided to commence the opening up of the residential market to competition just over two years from that date.

● a switch of responsibility from parliament and ministers to Ofgas. The principal consequence of the government's position has been the transfer of almost all of its former duties to the regulatory authority. Thus the provisions of the 1995 Gas Act confer very wide powers of discretion over the industry upon the Director General of Ofgas – appointed for a 5-year period by the Secretary of State for Trade and Industry. The notable exception is in the area of offshore regulation where the government has jealously guarded its regulatory power, refusing even to allow Ofgas jurisdiction over the terminals where gas is landed.

The regulatory model

The original model of British utility regulation has been succinctly summarized as follows:

Observation of the operation of regulatory systems overseas, especially in the United States, led the Government to seek to develop a quicker and less bureaucratic system of regulation. This was centred on the idea of a single independent regulator for each industry, operating without undue bureaucracy and supported by a small staff. The regulator would be appointed by the Government and the Government would retain important responsibilities in a number of areas. But in carrying out his or her allotted functions, each regulator would be independent of the Government in the performance of his or her duties.⁷

The reference to 'a quicker and less bureaucratic system' was advanced as 'light-handed' regulation and believed to be greatly superior to the huge North American professional regulatory bureaucracies. This concept has come under increasing strain over the past decade. We have already noted that the 1995 Gas Act transferred significant responsibilities from the government to the regulatory authority. The post-1993 period – when it was decided to open up the residential market to competition – placed considerable pressures on a relatively small staff required to devise and implement the complex and innovative opening of the residential gas

⁷ National Audit Office, *The Work of the Directors General of Telecommunications, Gas Supply, Water Services and Electricity Supply*, HC 645 (London: HMSO, 1996, para. 2.3, pp. 6, 7).

market on an extremely rapid timetable, at the same time as its regulatory duties.⁸ Problems have arisen with regard to the original regulatory model in terms of:

- the apparent lack of accountability of a single, unelected person appointed for a 5-year term with enormous decision-making power;
- the independence of the regulatory authority – a difficult concept to interpret in the British context;
- the question of whether the Office should be staffed with permanent and technically trained personnel. Aside from the Director General, the Office has traditionally been staffed with civil servants seconded for periods of 3–5 years;
- the resolution of overlaps with other regulatory bodies, principally the Office of Electricity Supply (OFFER) but also, as noted, the Department of Trade and Industry which is in charge of offshore gas (and oil) regulation;
- the continuing appropriateness of 'price cap' (RPI-X) regulation as the dominant regulatory methodology, particularly in relation to transportation charges.

All of these issues have, to some extent, contributed to the problems experienced over the past decade. For an industry to experience four major competition regulatory investigations within a decade is unprecedented. A common way of explaining these events is in the personalization of the relationship between the regulatory authority and BG. Certainly during the tenure of the first director general the adversarial nature of exchanges between BG and Ofgas grew to legendary proportions. This adversarial climate abated during the early years of the second director general's tenure, but then flared again in the run-up to the 1996 MMC reference. These highly public exchanges were probably a symptom (rather than a cause) of a regulatory framework, whereby a small office is required to

⁸ In 1994/95, the staff of Ofgas was 68, compared with Ofitel 162, Ofwat 178, Offer 215. By 1998 Ofgas staff had grown to 130 people. *Ibid.*, Figure 8, p. 30.

advise, implement and oversee fundamental and innovative change at breakneck speed.

The impact of competition on industry actors

British Gas The clearest impact of competition was on British Gas itself, which ceased to exist as an entity in February 1997. As far as employees were concerned, the impact was mixed: top executives – despite the unpleasant press coverage they received – saw their salaries increase significantly and retired on generous pensions. The rest of the workforce fared less well: at privatization, the company employed 90,000. At demerger, just over a decade later the workforce had shrunk to 36,000. For management and shareholders, the crucial issue has been how a company which, at privatization supplied 100% of gas to final consumers and which appeared to have been given a 25-year franchise to supply all but the largest industrial customers, allowed its share of the non-residential market to be reduced to 35%, and its entire franchise market to be opened up to competition within 12 years.

Shippers and suppliers During the phase of managed competition, it was relatively easy to gain market share and sell gas at a profit. Until mid-1995, BG was required to publish price schedules and progressively to give away its share of the industrial market. The first phase of the 'release gas' programme only required new shippers to present sufficient financial credentials to sign up for gas and sell on at a small profit. However, after 1994 and particularly as gas prices collapsed in the spring of 1995, this became a much more difficult and risky business. Shippers and suppliers which purchased gas in the early 1990s on long-term contracts with take or pay conditions have (like BG) encountered serious problems which were solved only after litigation.⁹ Others have suffered significant losses.

By late 1997 aside from Centrica (British Gas Trading plus Accord Energy), 13 companies held market shares greater than 1% in the non-

⁹ The two principal cases were between Enron and the owners of the 'J Block' field and between National Power and United Gas.

residential sectors. These included eight producer affiliates, one power generation company, three regional electricity company (REC) affiliates and one very small independent.¹⁰ It is clear that, aside from the very large REC affiliate, producers dominate the gas market. During 1997 several joint ventures serving the industrial market broke up including Quadra (Shell and Esso), Alliance (BP, Statoil and Norsk Hydro) and Kinetic (Conoco and PowerGen) with some companies withdrawing from the market. In the residential market a number of new alliances were forged between energy and non-energy companies.¹¹ Further activity of this kind can be anticipated.

Customers In the decade following privatization, all classes of customer saw a significant fall in real gas prices. For residential customers (and all others using less than 2,500 therms per year) the decline has been 24.27%. For industrial customers, the decline has been greater than 50%.¹² These are impressive figures, widely quoted by government officials and Ofgas. The official index of industrial fuel prices for 1996 (1990 = 100) shows gas at 66.1 compared with coal at 82.6, heavy fuel oil at 125.7, and electricity at 105.3.¹³ The same index in 1994, as gas-to-gas competition was starting in the industrial market, showed that with the exception of electricity, gas prices (relative to 1990) were significantly higher than prices of competitive fuels (relative to 1990). It also shows that, relative to 1990, 1996 gas prices had returned to the levels of 1979, whereas other

¹⁰ These figures are based on a sample of customers. They identify companies with more than 1% in any of the three non-residential sectors: interruptible, above 25,000 therms, below 25,000 therms. Figures from John Hall Associates quoted in *UK Gas Report (Financial Times)*, 24 November 1997, p. 14.

¹¹ For example the merger of Amerada Hess residential marketing operations with those of SWEB; the marketing alliances of Yorkshire Electricity and Southern Electric with the supermarket chains Asda and Argos (respectively); Northern Electric with SAGA (a company which markets a range of products to elderly people). Also members of trade union organizations forming a marketing group, and local authorities joining together to purchase gas.

¹² National Audit Office, op. cit.

¹³ *Digest of UK Energy Statistics* (London: HMSO, 1997), Table 85, p. 186. The gas index for the first three quarters of 1997 was at a similar level, but the indices of competing fuels had fallen somewhat.

fuels were still significantly above 1979 levels. In terms of prices there has been the coming of gas-to-gas competition has caused substantial falls, both with respect to competitive fuels and in comparison with gas prices in other European countries (see Table 3.13).

Aside from prices, the question of service standards became problematic with BG's difficulty in billing and invoicing – partly due to the introduction of new information technology systems, and partly the 'teething troubles' of a new system – reaching crisis proportions during 1996.¹⁴ Although concerns have been raised regarding the conduct of suppliers in the residential market, it is too early to evaluate performance with regard to public service obligations – particularly in the area of indebted customers and services to vulnerable groups. The issue of how different classes of customer will weigh the benefits of lower prices against different levels and qualities of service delivery remains to be seen.

Achievements and unresolved problems

The British experiment has produced a number of achievements of which the most important are that:

- a competitive and extremely dynamic market has been created, even if its early development owed more to the management of government and regulatory authorities than to the forces of supply and demand. All market sectors, including a corner of the residential market, have been opened to competition, and by early 1998 no disasters had occurred, despite the dire warnings of technical experts;
- prices paid by (particularly industrial) consumers have declined substantially. In the post-1994 period this can be largely attributed to the introduction of competition.

But there were also a number of unresolved problems:

- regulation: how the regulatory regime will evolve in terms of institutions, methodologies, priorities and timetables for implementing further liberalization measures;

¹⁴ Gas Consumers Council, *1996 Annual Report*.

- common carriage: whether the unique 'common carriage' regime is sustainable;¹⁵
- decline in standards of service and social consequences: concerns about the decline in BG's standards of service may simply be due to the enforced speed of the transition to a more competitive market, but it is difficult to be certain about how rapidly the situation will improve. Indeed as the residential market is opened up, with the problems of adjusting to a system where large numbers of customers may change their supplier (possibly more than once), service quality may deteriorate further. Public service (especially social) obligations are an area where the ability and willingness of suppliers to fulfil their obligations, and the ability of Ofgas (or any other organization) to police their performance, remains uncertain;
- information technology: the ability of information technology systems to deal with system balancing and large numbers of customers changing their supplier, especially during the introduction of residential competition.

One problem which appeared to have been resolved by late 1997 was that of contractual liabilities arising from the introduction of competition. All of BG's contracts contained take or pay clauses placing long-term purchase obligations on the buyer. Most of these were entered into when BG had 100% of the market and an absolute obligation to provide a secure supply. With BG's market share much reduced, the company was unable to take the volumes foreseen under these contracts and incurred serious financial penalties. By the end of 1997 British Gas and its successor company Centrica, the heir to these contractual liabilities, had completed the renegotiation of those contracts at a cost to shareholders exceeding £750 million.¹⁶

¹⁵ Common carriage is a system whereby when the capacity of a pipeline system is oversubscribed, the requirements of all shippers are scaled back on a pro rata basis. The most common system is 'contract carriage' where capacity is (commonly) allocated on a 'first come first served' basis.

¹⁶ Centrica completes its renegotiation of take or pay supply contracts', *UK Gas Report*, 16 January 1998, p. 5. For a general account of this problem, see M. Stoppard, *Today's Gas Glut and Yesterday's Contracts: The British Gas Predicament* (Oxford: Oxford Institute for Energy Studies, 1996).

Policy on international trade

Despite constant homilies about the merits of free trade and free markets from British politicians since 1980, international trade in gas remained completely controlled by the government. The latter repeatedly refused to allow any further import contracts for Norwegian gas to be signed, as of 1984.¹⁷ Denial of imports was replaced by a determination to export gas as the government forced companies to form a committee (chaired by a British civil servant) to create (what eventually became) the Interconnector pipeline project between Britain and Belgium.¹⁸ Any attempt to sponsor alternative export lines – for example the Britannia field whose owners tried desperately to obtain permission for their own export line direct to the Continent – was rejected. For the Interconnector pipeline, the government dictated the direction of gas flow, the route, the ownership structure (which could not be dominated by a single entity), and (a large part of) the commercial rules governing the pipeline. Only in April 1997, after construction of the Interconnector was well under way, did the government finally agree on a revision of the Frigg Treaty which will allow new gas to be piped through the existing system. The UK and Norwegian governments have also signed a framework agreement on other cross-boundary lines which will avoid the need for a separate treaty for future cases.¹⁹

While the main reason for the policy on trade was the promotion of maximum possible UKCS production on the fastest possible timetable, for taxation and balance of payments reasons the issue of liberalization has been of some importance. The creation of a grid-to-grid connection with a Continental European country (Belgium), capable of carrying 20 BCM per year with fragmented (and tradeable) ownership of capacity, will constitute a considerable step forward in gas trading. The Interconnector was intended to provide a means by which the British could export both their gas and their liberalization philosophy to the Continent.

¹⁷ J. P. Stern, 'After Sleipner: a policy for UK gas supplies', *Energy Policy*, February 1986, pp. 9–14.

¹⁸ A useful summary of the Interconnector project can be found in James Allcock, 'The Interconnector: its origins and prospects', Gastech 1996 Conference Proceedings.

¹⁹ 'Fraser's Frigg footnote', *Gas Matters*, May 1997, pp. 30–31. John Michell, 'North Sea Gas Trade and Regulation in a New Era of Cooperation', a paper to the European Autumn Gas Conference, Barcelona, 4 and 5 November 1997.

Lessons from the British experiment

The development of competition and the decline in prices, despite being the most often-quoted lessons of the British experiment, may not be the most important. For the development of competition, liberalization and regulation in Continental Europe, it may be of greater significance that:

- the anti-competitive structure of the British gas industry required a period of 12 years from the passage of first legislation to the arrival of self-sustaining competition. This is a lengthy period considering the passage of legislation, massively proactive regulation and a relatively compliant dominant player;
- once it had been acknowledged in 1991 that competition had failed and could not succeed without a major change in market structure, the regulatory act of requiring the dominant player to withdraw from nearly half of the contestable market caused self-sustaining competition to develop within a 3-year period;
- despite the initial proposition of 'light-handed regulation', the development of self-sustaining competition has required significant regulatory complexity. Even a specialized gas regulatory office has had great difficulty in overseeing and implementing such complexities;
- once the monopsony power of the gatekeeper performing the supply/demand balancing role was removed, producers/suppliers quickly oversupplied the market, causing a sharp fall in purchase prices.

Finally, the impact of the privatization of the electricity industry cannot be underestimated.²⁰ At the same time as events in the gas industry were unfolding, a very large amount of baseload gas-fired generation was being constructed in Britain. Private electricity generation and distribution companies were becoming major actors in all segments of the gas chain. The impact of developments in electricity markets, including electricity regulation, on the liberalization of British gas markets continues to be enormous.

Thus, one of the most important lessons is the swiftness of institutional

²⁰ John Surrey (ed.), *The British Electricity Experiment. Privatisation: the Record, the Issues, the Lessons* (London: Earthscan, 1996).

change and market structure which has taken place in Britain starting in 1990. Institutionally, there have been significant numbers of new entrants (some of which have already disappeared from the market). The roles of many companies have changed and broadened to cover other parts of the chain (again some have failed to profit from these activities and already withdrawn) and different ranges of services. The dominant player in the market, British Gas, has ceased to exist and a large part of its market share has been taken by others. From a position of almost zero in 1990, power generation customers account for nearly 20% of the gas market and this share will probably exceed 30% by 2010. From a market dominated by long-term contracts and confidential prices, short-term trades are now growing in importance and short-term prices – quoted daily and several months ahead on the International Petroleum Exchange Market – have become an important marker for all gas sales.

In summary, the British gas market in 1998 is unrecognizable from that of a decade earlier.

The Netherlands: from opponent to leader

The implacable opposition of Shell and Exxon (the owners of the Groningen field) and the Dutch government to liberalization proposals in early debates on these issues hardly suggested that the Netherlands would be in the forefront of radical change in this area.²¹ However, the 1995 Dutch White Paper on energy policy may prove to be a landmark document in the liberalization of Continental European gas and electricity industries.²² For the first time, the government of a Continental European country set out a policy for radical liberalization of both energy utility industries, starting with third party access to networks for large consumers, with an intention to extend access to smaller consumers in the future.

²¹ See for example, *Gasunie Annual Report*, 1991 and 1992, p. 5. It is important to stress the opposition of Shell and Exxon in respect of the views of Dutch producers. Other producers had spoken in favour of liberalization.

²² Ministry of Economic Affairs, *Third White Paper on Energy Policy* (The Hague: 1996). Although we are focusing here on the liberalization provisions, it is important to recognize that the major focus of the White Paper is sustainability, and specifically the Dutch response to the challenge of climate change.

Structural changes in energy utility markets

The White Paper summarized the intended changes in the gas and electricity markets as follows:

- decision making will change from being 'supply driven' to 'demand driven';
- network functions will be disengaged from production and supply/distribution, the exception being in gas where transmission and sales will remain under the Gasunie management;
- access to networks on non-discriminatory terms will be allowed;
- independent monitoring (regulation) of network functions will be implemented;
- there will be a transitional process towards freedom of choice for all consumers;
- captive customers will continue to receive government protection;
- electricity generation, trade and supplies to non-captive customers are to be liberalized;
- energy utilities will separate their functions, creating single-function utilities as well as utilities with combined functions (e.g. generation, supply and service);
- greater competition will be promoted, not necessarily following Europe, but stimulating competition within the Netherlands.

Table 5.1 summarizes some of the detail of these changes which will take place in the gas and electricity industries. While our concern here is with the impact on the gas industry, the main energy focus of the White Paper was the electricity industry. The document was produced because of the requirement for government to report to Parliament on the progress of the 1989 Electricity Act. As the White Paper was being prepared, the Minister of Economic Affairs decided to adopt similar measures for the gas industry.

The gas industry

The Dutch gas industry is the biggest in Europe in terms of production, exports and low-cost accessible reserves. The discovery of the giant Groningen

Table 5.1: Principal changes to statutory framework and other preconditions

Electricity	Situation in 1996	Within five years
Generation	private generators free distributors >25MW approval by SEP minimum capacity public utilities	free
Transmission	transmission not transparent	non-discriminatory grid access independent regulation
Trade	exports free (not distributors) imports free (not distributors) maximum tariffs	exports/imports free non-captives free captives protected (coverage plans, maximum tariffs)
Decentralised capacity	cogeneration and renewables equal mandated feedback to distributor; payment for 'avoided costs'	differentiated for cogeneration and renewables Cogeneration >2MW: free market cogeneration <2MW: regulated at market value
New distribution grids	private joint ventures: only with local distributor not regulated	joint ventures: freedom of choice renewables: stimulatory feedback payment regional decision based on nationwide criteria
Gas		
Production	free (based on permit)	free (based on permit)
Transmission	not regulated	free non-discriminatory grid access, independent regulation, 'negotiated access'
Trade	producers must sell gas to Gasunie for domestic market	producers free non-captives free captives protected (coverage plans, maximum tariffs)
New distribution grids	not regulated	regional decision based on nationwide criteria

Source: *Third White Paper on Energy Policy*, 1996, p. 96

field in the late 1950s gave rise to exportable surpluses of gas, which allowed natural gas industries to be created in many Continental European countries. The Groningen discovery also provided the incentive to explore for gas more widely in the North Sea. Dutch gas exploration, production and exports have been relatively tightly controlled by government policy. However, this control has been exercised by means of informal instructions; there is no legal restriction on access to high-pressure pipelines and, in the past, Gasunie has allowed access for specific producers to sell to specific customers.

The Dutch government required Gasunie – the merchant transmission company – to operate a very strict depletion policy in order to maintain security of supply for domestic gas consumers. Remaining reserves must be adequate to cover 25 years of Dutch domestic gas demand plus export contract commitments.²³ The Ministry of Economics has the power to earmark gas of Dutch origin for domestic use. For the gas (and electricity) market, the White Paper envisages a gradual move towards liberalization. Non-discriminatory ‘negotiated’ access to Gasunie’s transmission system will be introduced immediately for non-captive customers with an annual demand above 10 million cubic metres. Captive customers with an annual demand below 170,000 cubic metres will continue to be supplied by their distribution company. Intermediate customers with an annual demand of 170,000–10 million cubic metres will be given an opportunity to become non-captive over the next 5 years. As Table 5.2 shows, this means that 40% of the gas market could be immediately liberalized and within 5 years, this figure could rise to 60%. As far as the domestic market is concerned, there are important elements of continuity with current policy. Exploration and production policy will remain tightly controlled by the government in terms of allowed production levels. The 25 years’ reserve coverage of internal demand will be retained, although this will be interpreted more flexibly than in the past, allowing for a change in policy towards international trade.

²³ For background to Dutch gas policy see Javier Estrada, Arild Moe and Kare Dahl Martinsen, *The Development of European Gas Markets: Environmental, Economic and Political Perspectives* (Chichester: John Wiley, 1995), pp. 204–11.

Table 5.2: Captive, intermediate and non-captive gas and electricity customers

	% of market	
	Gas	Electricity
Captive	40	40–45
Intermediate	20	30
Non-captive	40	25–30

Source: *Third White Paper on Energy Policy*, 1996, p. 84.

The impact of Dutch liberalization measures could be significant for the European gas market. Dutch exports amount to some 40 BCM per year, making the country the largest external supplier after Russia. However, there is an important distinction between Groningen gas exports – which have a lower gross calorific value (9.24 kilowatt hours per standard cubic metre) than the majority of gas traded in Europe (10.78–11.55 kWh/Sm³) – and exports of Dutch offshore gas with a higher calorific value (10.01 kWh/Sm³). This difference in calorific value has meant that gas from Groningen and offshore fields has been marketed through two separate pipeline networks, both within the Netherlands and throughout Europe. France, Belgium and Germany receive low and high CV gas from the Netherlands, while Italy and Switzerland receive only high CV gas. Traditionally all production for domestic Dutch use had to be offered to Gasunie, but this did not apply to exports. Nevertheless, over time Gasunie has come to manage all export contracts. In addition, despite being a major exporter, Gasunie also imports small quantities of Norwegian (and more recently British) gas on long-term contracts. Both Gasunie and the Dutch government have also insisted that the country’s long-term future will see an increase in gas imports as domestic reserves become further depleted. Less than six months after publication of the White Paper, Gasunie announced a contract with Gazprom, allowing for an import of 4 BCM of Russian gas per year, with associated services to promote security for buyers of Russian gas in Europe.²⁴

²⁴ ‘Gasunie opens new markets to Gazprom’, *Gas Matters*, June 1996, pp. 1–2.

Developments since the White Paper

By the end of 1997 contracts between large industrial and power-generation customers and British producers through the Interconnector pipeline had already seen Gasunie sign transportation agreements to deliver gas to Dutch distribution companies and power generators (see Chapter 3). In addition, industrial users with a demand greater than 10 million cubic metres/year had a realistic opportunity to choose their supplier. Discussions were under way to introduce a similar choice for customers with an annual consumption of 170,000 cubic metres, accounting for 64% of the Dutch market, by 2002; by 2007, the residential gas market would also be liberalized.²⁵ At the time of writing, such proposals are only in the discussion phase. But they are a great deal more radical than anything under consideration elsewhere in Continental Europe.

Yet there is little indication as to how this radical liberalization will be implemented. The White Paper recognized that liberalization measures would require a new regulatory framework. However, this framework was discussed only in the following rather general terms:

- (1) at least once every four years a report will be published assessing the energy market with respect to security, sustainability, competitiveness and environment;
- (2) a transparent statutory and administrative framework is required for existing and new electricity, gas and heat infrastructure. As well as access to networks, the issue of construction of new infrastructure will also be dealt with;
- (3) statutory arrangements for liberalization of electricity and gas markets will be devised, with rights and duties of suppliers *vis-à-vis* captive customers;
- (4) regulation will relate first to network access issues and supplies to captive customers. This regulation will be permanent. There will also be government regulation of supplies to captive customers which will cease when these customers no longer have the status of 'captive'.²⁶

²⁵ 'Dutch unveil competition plans', *International Gas Report*, 9 January 1998, pp. 20–21.

²⁶ White Paper, op. cit., pp. 115 and 137.

In late 1997 the Electricity Act was passed which included provisions for regulation of the electricity and (potentially) the gas industry. At the time of writing, this was being formulated but it appeared that the new regulatory body would be part of the Ministry of Economic Affairs for at least 5 years, at the end of which it would become either independent or part of the (newly created) Competition Office.²⁷ The general impression is that Dutch regulation will be reactive rather than proactive, and that regulators will not intervene unless absolutely necessary.

Origins and consequences of the Dutch position

As far as the liberalization of Continental European gas and electricity industries is concerned the Dutch White Paper has already proved to be a landmark document. This was the first example of a government of an important Continental European country (and EU member state) publishing a policy document which included a commitment to radical liberalization of both major energy utility industries. However, alongside this commitment, there are questions to be asked about the strategy and tactics of the Dutch government.

First, it is interesting to examine the reasons behind the sea change in Dutch government policy. Five major points seem to have been particularly influential in the decision making of the new government:

- the apparent willingness to exchange a reduction of upstream revenues (from taxation) for the competitive advantage to industry which would result from a fall in gas prices to consumers;
- the fact that the electricity situation, particularly in respect of over-capacity in cogeneration, required a major reform. There is evidence that gas was considered as an afterthought to electricity;²⁸
- the fact that the British–Belgian Interconnector pipeline would be likely to make the Dutch position against liberalized access increasingly

²⁷ 'Electricity in the Netherlands: balancing liberalization with defence', *Financial Times*, *EC Energy Monthly*, August 1997, pp. 6–8.

²⁸ Gertjan Lankhorst, *The Dutch White Paper: What it Means for the European Gas Industry*, a paper to the European Autumn Gas Conference, Copenhagen, November 1996.

- untenable and prevent Dutch producers and Gasunie from realizing significant commercial opportunities;
- the arrival of a new Minister of Economics (Wijers) who was strongly in favour of liberalization.
 - the Dutch Presidency of the EU (the first six months of 1997).

Throughout the White Paper there are references to conditions which may be used to guide the pace of liberalization. First, the speed of a European Union commitment to liberalization measures, and the regulation of utilities. Second, and related to the first, an issue of 'reciprocity' of measures within other European Union member countries. The White Paper gave the impression that the progress of Dutch liberalization reforms will be conditional on the progress of EU legislation and regulation, and the willingness of other European countries to introduce similar liberalization measures. In that respect, discussions which were taking place at the end of 1997 were extremely radical in comparison to those being held in other countries in Continental Europe. Under these proposals, liberalization of the Dutch residential gas market could be taking place at the same time as other EU member states are reducing eligibility thresholds to 5 million cubic metres/year.

However, before leaving the impression that the Dutch will inevitably hurdle down a liberalization path similar to the British, two caveats should be noted. First, the Dutch White Paper was principally about sustainability and climate change policy. It will be interesting to see whether, as they unfold, the Dutch sustainability and liberalization initiatives in the White Paper will be compatible or conflicting. Unless new entrants in the gas and electricity markets can be persuaded to concentrate their competitive activity in the area of conservation and efficiency packages, rather than simply offering reduced prices (which may remove the incentive of consumers to save energy), liberalization could prove to be the enemy of energy conservation. Second, Dutch liberalization initiatives have been strongly identified with a particular government and a particular minister. Political changes within the Netherlands could see changes in the country's liberalization agenda.

Germany: pipeline competition with strong resistance to liberalization²⁹

In November 1989, as the fall of the Berlin Wall signalled the beginning of the reunification of Germany and the end of the postwar era in Europe, an equally dramatic event occurred in the German gas industry. Wintershall, a hitherto small West German gas producer, announced that it planned to build a pipeline – the Midal line – from Emden (the landfall of Norwegian gas supplies to Continental Europe) via Kassel to Ludwigshafen, the headquarters of Wintershall's parent company, the chemicals giant BASF.³⁰ This action followed fierce price disputes between BASF and its supplier Ruhrgas over a period of years.³¹ These disputes essentially focused on the prices which BASF had to pay as a result of the *Anlegemarketsprinzip* – pricing according to the market value of competing fuels for a specific industrial customer (see Chapter 2). During this period, BASF took the decision that it would need to become directly involved in the gas market in order to improve its commercial position *vis-à-vis* the transmission companies. The events of 1989–91 changed the political landscape, presented opportunities which could not have been imagined, and opened up a new chapter in the German gas industry.

The announcement of the intention to build the Midal line amounted to 'a declaration of war' on the market domination of Ruhrgas in West Germany.³² With the reunification of Germany, however, the gas industry of the former German Democratic Republic (GDR) became available for acquisition. In July 1990 'the pre-emptive strike' of Ruhrgas and BEB, purchasing 35% and 10% respectively of the East German transmission company VNG, appeared to signal the 'takeover' of the eastern part of Germany by entrenched dominant companies in the Federal Republic.³³

²⁹ The early paragraphs of this account are reproduced from the author's earlier work: *Third Party Access in European Gas Industries: Regulation-driven or Market-led?* (London: EEP/RIIA, 1992), pp. 88–89.

³⁰ 'Wintershall plans major German trunkline', *JGR*, 10 November 1989, pp. 1–2.

³¹ 'German giants engage in a little hardball', *Gas Matters*, 30 November 1991, pp. 3–5.

³² Burkhard Richter, 'Recent developments in Germany concerning competition in the gas industry', *Oil and Gas Law and Taxation Review*, No. 4, 1989/90, pp. 91–96.

³³ In the German Democratic Republic the gas transmission company was known as Schwartze Pumpe. The new company formed after reunification was named Verbundnetzgas