

Energy Security and Securitisation in the Federal Republic of Germany: Between Reconstruction and the Oil Crisis (1945–1973)

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Introduction

Energy security has long been a topic of considerable interest to specialists and the public alike, not least since the beginning of the war in Ukraine. Discussions often cite earlier crises and anxieties surrounding energy security. Probably the most vivid collective memories are associated with the oil crisis of 1973. This event has held a particular fascination for historians, a fascination that reached its peak at the time of the fiftieth “anniversary” of the crisis in 2023.¹

The research field, however, is highly varied. One strand considers the role of oil as an energy source, and its economic and geostrategic importance in the era of the Cold War and decolonisation, for example in relation to OPEC and the interests of the Global South since the 1960s.² Another touches upon the interests and strategies of the major oil-producing concerns.³ There is also a significant body of research that discusses the development and consequences of the oil crisis in West and East Germany respectively.⁴ Here, Henning Türk’s publication on the history of energy provision in West Germany and the GDR is one of the few to consider retrospectively the role of different energy sources throughout the period of the oil crisis. Unlike most researchers in this area, Türk goes so far as to offer a long-term perspective on German energy provision over a period

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Recent literature includes Türk, Treibstoff; Glässer, Marktmacht; Graf, Öl.

2 Kreienbaum, Öl; Merril, Crises; Bini/Garavini/Giuliano (eds.), Shock; Yergin, Prize; Graf, Öl; Glässer, Marktmacht.

3 Glässer, Marktmacht, 41–95; Luciani, Companies; Sampson, Schwestern.

4 Hohensee, Ölpreisschock; Hohensee/Salewski (eds.), Energie-Politik-Geschichte; Türk, Treibstoff.

stretching from the Third Reich to the 1970s, with a special focus on the parallel histories of the two German states from 1945–1990 (as Türk points out, there is as yet no history of energy provision for Germany as a whole).⁵ Falk Illing offers a *longue durée* analysis of the role of energy provision in economic and security policy for the period between 1949 and 2013, with an occasional discussion of energy security.⁶ A small brochure by Helga Steeg, executive director of the International Energy Agency (IEA) from 1984–1994, makes mention of historical aspects of energy supply security, although mainly in relation to the work of the IEA from 1974.⁷

This chapter examines energy and energy provision from a security perspective. In this analysis, the concept of *energy security* is of central importance. Against our own historic backdrop of the war in Ukraine and the resulting insecurity in relation to energy provision, we are often unable to understand why politicians, economists and businesses entered into certain dependent relationships after the Second World War, apparently in full knowledge of the risks involved. Consequently, the following analysis also endeavours to understand the perceptions, interpretations and imaginaries of various actors over a longer period of time, along with their subsequent actions and to what extent they had choices and options in the realm of energy provision and energy security. In this way, we can also locate them in the context of their respective political and economic framework conditions.

Until now, the topic of energy security has mostly been dominated by research from an economic and political perspective. Frank Umbach, the research director at the European Cluster for Climate, Energy and Resources Security (EUCERS) at the Center for Advanced Security, Strategic and Integration Studies (CASSIS) has instigated particularly valuable approaches in the last few years. He views the topic within a geopolitical and ecological context, highlighting its significance within foreign, defence and economic policy. As a corollary, it becomes clear that crises and wars are of key importance in how these policy areas respond.⁸ Umbach's definition of energy security is based on that of the IEA, which understands it as "the

5 Türk, Treibstoff, 11, 14. Türk's 160-page book represents an initial summary of the topic. A comprehensive study of the history of crude oil is offered in *Karlsch/Stokes, Öl*.

6 Illing, *Energiepolitik*.

7 Steeg, *Energieversorgungssicherheit*.

8 Umbach, *Energiesicherheit*; Umbach, *Internationale Energiesicherheit*; Umbach, *Sicherheitspolitik*.

uninterrupted availability of energy resources at an affordable price,” while differentiating between long-term and short-term energy security:

*Long-term energy security mainly deals with timely investments to supply energy in line with economic developments and environmental needs. On the other hand, short-term energy security focuses on the ability of the energy system to react promptly to sudden changes in the supply-demand balance.*⁹

The former therefore involves questions of the long-term energy supply and supply security, as well as the resulting vulnerabilities; it is concerned with import dependencies, interruptions in the supply chain, risk assessments, experiences and perceptions, and the consequent measures to be addressed through energy policy, practical planning and storage. This also involves consideration of alternative energy sources and various diversification strategies in the context of a long-term structural transformation that is affected by short-term internal and external events.

Over the period from 1945 to 1973, the importance of external influences increased dramatically, starting with the differing policies of the Allied occupying forces, and subsequently events such as the Korean War, the Cold War and the conflicts in the Middle East. The period also saw the first phases of decolonisation and the impact of this on the energy supply. In the case of West Germany, to Umbach's long-term and short-term aspects of energy security must be added numerous internal and external influencing factors. Together, these led to a complex entanglement of aspects of energy security and ultimately securitization under constantly changing geopolitical and geo-economic framework conditions.

Umbach's research focuses mainly on the period since 2000. His book, *Globale Energiesicherheit* (Global Energy Security), must therefore be read against the backdrop of this period, especially the events of 9/11 and their aftermath, the growing importance of the new global player China and developments in the Middle East. All of these had, and still have, vital importance for energy security in Germany. The question of energy security—or, to put it another way, the uncertainty surrounding energy provision—is a golden thread running through Germany's history, at least in the West. This theme, then, lies at the heart of this chapter. But in retrospect, it can be seen that its history reaches back much further than the oil crisis of 1973–1974.

9 Cited after Umbach, Sicherheitspolitik, 9.

This chapter examines energy security in West Germany between 1945 and 1973. In doing so, it pays particular attention to the central topics of the research group “Dynamics of Security” (SFB/TRR 138), addressing questions about specific energy “situations”, “heuristics” and “repertoires”.¹⁰ My aim is not to trace the development of energy provision in general.¹¹ Rather, I want to look at this topic from a security perspective. “Dynamics of Security” foregrounds issues of “energy security” in order to establish how and at what periods energy provision was treated as a security-relevant issue. In the period under discussion (1945 to the oil crisis of 1973–1974), this means identifying different phases of energy security and looking for specific traits and/or patterns within these phases. These, in turn, are seen as the basis for the “securitisation” structures that define the three key aspects of our investigation, “situations”, “heuristics” and “repertoires”:

Situations: The first task is to identify situational phases and undertake situational analyses in relation to (energy) security. I ask how situations and related phenomena and contexts in relation to energy provision changed in different periods of time: the immediate post-war period; Allied occupation and its significance for the future economic order in Germany (a social, market-based economy; the Marshall Plan); the reconstruction period and the transition from coal to crude oil as the dominant form of energy; the emergence of a new European, international economy in the 1950s; and finally the period of growing international conflict and the Cold War in the 1960s.

Heuristics: The second step is to understand how these developments were seen by the actors involved at each stage, looking at how they were assessed, interpreted, perceived and communicated.

Repertoires: Finally, I analyse the response of West Germany to each phase, looking at the measures and solutions adopted by policymakers to ensure the energy supply and to strengthen energy security. The structure of this chapter broadly follows this systematic approach.

10 For a methodological background to the concepts used in this chapter, see Bonacker, Sicherheit.

11 For a more detailed analysis, see Türk, Treibstoff.

Energy Supply and Energy Security “Situations”, 1945–1973

Occupation (1945–1949)

The provision of energy following the end of the Second World War was dominated by two key issues. First, concerns centred on the physical availability of coal including both hard coal (*Steinkohle*) and lignite, or “brown coal” (*Braunkohle*), in the aftermath of the destruction of many mining operations in the war and the exploitative extractive policy of the Nazi regime and its Four-Year Plan. But there were also major uncertainties in relation to ownership and property rights, as well as disputes among the Allies over how best to ensure the security of coal, one of West Germany’s flagship industries, as a basis for the reconstruction of Germany.

Since industrialisation, hard coal had been the dominant source of energy in Germany. There were usually ample supplies available, which helped to ensure energy security. But the First and Second World Wars led to an unprecedented demand for raw materials and fuel. This in turn led to crises, not so much because resources themselves were in short supply, but initially, during the First World War, because of problems with transportation, and subsequently as a result of state policy measures before and during the Second World War, such as Hitler’s Four-Year Plan and insistence on economic self-sufficiency. The latter in particular led to a break with global markets, making it impossible for Germany to obtain crude oil at the cheaper global prices. Synthetic fuel production under the Four-Year Plan, crude oil supplies from the Soviet Union and friendly Eastern European states, and later through extraction from Nazi-occupied Eastern Europe, could not meet growing energy demands during the Second World War. No solution was found for this problem at the time.¹²

Once the war ended, the entire question of energy provision had to be re-thought and restructured on the basis of the varying interests of the occupying powers. Hard coal remained the most important energy source in West Germany—and indeed in Europe after 1945—and the Ruhr continued to own the richest coal seams in Europe, so that in principle, there were abundant sources of energy available. Yet despite this basic availability, there were still problems obtaining coal even after 1945, mainly due to transport issues, lack of manpower and difficulties in distribution.

12 *Türk*, Treibstoff, 17–26; *Roelevink/Ziegler*, Rohstoffwirtschaft, 132–133; *Tooze*, Ökonomie, 243–288.

This threatened Germany's energy security, especially as hard coal and the economic development of the occupied zones were the "key to industrial manufacturing output" and thus to European reconstruction.¹³

The coal problem was thus also the energy problem, and was therefore a decisive factor in the "situation"—that is, in economics and economic policy constellations—after the end of the war. For example, it played a major role in the French claims to the Saarland and its coal seams, claims that arose out of France's economic and defence interests. From a West German point of view, coal was also the reason for potential Allied attempts to confiscate, export or dismantle energetic and industrial resources for their own purposes; at one point, even a possible internationalisation of the Ruhr under Soviet leadership was mooted. Coal was also key to the decentralisation and restructuring of essential industries after the end of the Third Reich and their embedding in a new social order, as called for by the West German trade unions.¹⁴

Thus, the situation after 1945 was characterised by a complex entanglement of conflicting interests and multifactorial uncertainties in relation to the energy supply, based both on infrastructure problems and conflicting national and international interests, including hostility to proposed nationalisation, the potential dismantling of operations through the Allies, Western European (especially French) interest in gaining control of German hard coal and the Soviet desire to "internationalise" the Ruhr. As a result, Germany's energy provision was highly dependent on the claims and interests of the Allied powers. Energy was decisive for the post-war "situation" in Germany and Europe, which entered a newly threatening phase with the beginning of the Cold War and its attending uncertainties.

1950s

The beginning of the 1950s was also marked by an energy crisis. Government regulation of the coal industry ended in 1950, but enforced exports of coal to other nations continued. There was no certainty that enough coal would continue to be available, either in Germany or in Europe as a whole. Eventually, West Germany began (again) to operate small collieries such as drift and tunnel mines, and even to import coal from abroad,

13 Abelshauser, *Ruhrkohlenbergbau*, 44.

14 Petzina, *Wirtschaft*, 492–505.

especially from the US. But with the outbreak of the Korean War in the summer of 1950 and the beginning of the Cold War, the energy crisis took on geostrategic and global dimensions. Soon, the electricity supply was also impacted, as it was also coal-dependent. The Korean War brought a dramatic upswing in the demand for raw materials and armaments. This in turn affected the West German energy economy, which was itself facing demands from the US government for its expansion, if necessary through government regulation. Ultimately, West German energy providers, like many other industries, would benefit from a “Korea boom”.¹⁵

West Germany’s energy situation was embedded in international, European and global energy contexts, as became increasingly clear in the course of the 1950s. This decade saw the “Europeanisation” of the industry with the founding of the European Coal and Steel Community (ECSC) in 1952, the establishment of the European Economic Community (EEC) and EURATOM in 1957, the Suez crisis in 1956, the 1958 mining crisis in West Germany—which marked the beginning of the transition from coal to crude oil—and West Germany’s agreement with the Soviet Union in the same year regarding large-diameter pipes for the supply of oil, and later, gas.

This bundle of “situations” increasingly revealed uncertainties and vulnerabilities in the development of the West German economy. In particular, in this period of Germany’s “economic miracle” and against the backdrop of a surplus of both hard coal and lignite, it revealed an almost unprecedented discrepancy between the substantial energy resources available domestically (in the form of coal), economic growth and external challenges. The Suez crisis in 1956 brought these challenges to a head. The war in Suez represented a major threat to the crude oil supply to West Germany, as 30 percent of its oil came via the Suez Canal. The conflict itself, however, was only one aspect of the Cold War, during which crude oil became a “central factor in US security and foreign policy”. As such, it touched on fundamental questions—from Nasser’s plans for nationalisation to the Soviet Union’s dominant influence in the Middle East. It implicitly demonstrated far-reaching geostrategic shifts in relation to the global energy supply.¹⁶

Yet another threat—at least from the perspective of German industry and its focus on coal—were the imports of hard coal from the US, which as

15 *Abelshauser*, *Ruhrkohlenbergbau*, 70–72; *Adamsen/Heiner*, *Investitionshilfe*, 85–89, 105, 109.

16 *Glässer*, *Marktmacht*, 85; *Karlsch/Stokes*, *Öl*, 296–301.

early as the beginning of the 1950s had been helping to mitigate supply bottlenecks. Two years later, this situation had worsened to the point of a full-blown “coal crisis”. But this crisis had nothing to do with a shortage of coal in West German mining regions. Rather, it had become clear that the German deep mining industry, which required an immense investment of money and technology on the part of the state, could not match the prices offered by competing coal regions in the US. Although the American government also subsidised its domestic coal industry, it was able to do so at a far lower cost. This led to a paradoxical situation in which West Germany, despite continuing to own abundant coal seams, could hardly afford to mine them. Simultaneously, crude oil was proving to be an increasingly strong competitor. In 1958, the first collieries were closed in West Germany. The next years saw more and more mines shut down, along with a huge increase in crude oil imports from various regions of the globe. In combination, these two factors were the catalyst for a fundamental restructure of the energy provision in West Germany and a transformation of its energy market.¹⁷

This was not all. 1958 also saw West Germany’s first contract with the Soviet Union to provide large-diameter pipelines to the USSR for the purpose of laying an oil pipeline. While this agreement can be seen as part of an overall transformation of the energy sector, it was also hugely significant from a geostrategic perspective, taking place as it did at the height of the Cold War. The export of large-diameter pipes by West German steel companies had been prohibited for many years under an “embargo list” drawn up during the Cold War to prevent trade in “sensitive” goods with Eastern Bloc countries. In 1958, however, such exports were taken off the list, and consequently, the Soviet Union entered into major trade agreements with European companies—and especially with West German manufacturers—for the provision of oil and gas pipelines. In return, the USSR exported crude oil to Western Europe, including West Germany. Against the backdrop of the coal crisis, from a West German perspective this was a welcome chance to add to and diversify its energy provision. But at the beginning of the 1960s it led to significant differences with the Kennedy administration in the US. Nor were these differences resolved in the course of the next decades.¹⁸

17 Abelshauser, *Ruhrkohlenbergbau*, 87–101; *Karlsch/Stokes, Öl*, 310–314.

18 Müller, *Erdgas-Röhren-Konflikt*, 504–505.

In summary, energy provision in West Germany in the 1950s was becoming increasingly internationalised. This led to considerable challenges for traditional domestic energy in the form of hard coal and lignite. It also resulted in a “situation” of growing dependence on foreign suppliers. This created insecurities. But during the Cold War, such insecurities were viewed as a price worth paying from a political, geostrategic and economic perspective, given the need to remain close to the US and the problems Germany was facing on the coal market.

1960s

In the 1960s, the energy situation in West Germany was characterised by an increasing demand for energy on the part of industry and private households alike during an economic boom, and conflict situations arising from the Cold War and decolonisation.

Although the growth rate of the West German economy slowed slightly in this decade compared to that of the 1950s, it still lay somewhere between just under 4 percent and 5 percent. The general advance of mass consumption and the increasing use of household gadgets and cars led to a corresponding increase in energy use by manufacturing and individuals. The primary energy consumption of West Germany as a whole rose by around 50 percent in this decade. The increased consumption by private households was particularly noticeable. In the industrial sector, this transformation in energy use was most apparent in the chemical industries, where, within just a few years, the respective use of coal and crude oil was almost completely inverted. In 1957, around three quarters of all chemicals were manufactured on the basis of coal. Six years later, the figure was only 37 percent, with the remaining two thirds based on crude oil and natural gas. Indeed, the much-heralded “age of plastic”, which itself stood for the transformation of consumer society, was only possible as a result of a fundamental transition from coal to crude oil. Overall, this structural change on the energy market was characterised by a rapid rise in the use of crude oil accompanied by a clear decrease in the use of hard coal from the mid-1960s. Between the end of the 1950s and the mid-1960s, in terms of energy use hard coal made up around 80–95 million tonnes of coal equivalent (tce). By 1970, this figure had sunk to around 70m tce. By contrast, the proportion of crude oil rose from around 10m tce in 1958 to

around 70m tce in 1970. 1966 was the first year in which West Germany consumed more crude oil than hard coal. These figures demonstrate how the “fall of coal” and the “victory of crude oil” were concomitant processes, and are evidence of a dramatic structural change in energy provision in West Germany in the 1960s.¹⁹

This structural transformation was due to several different factors. First, crude oil offered a number of natural advantages to coal, first and foremost a significantly higher calorific value. Crude oil prices were also sinking heavily. The price of crude oil was not only lower than that of German coal, but also than that of the imported US-American coal that since the 1950s had been an increasingly strong market competitor in West Germany. This price advantage was linked to a significant extent to the discovery of new oil fields in the Middle East, Africa and South America.²⁰

But although in the 1960s the cheap oil supply seemed to be good news for West German companies and consumers, it came with a different kind of price label attached. This was the growing dependence of West German energy provision on countries that produced crude oil. In this sense, the founding of OPEC in 1960 was highly significant, as it led to the emergence of new actors on the international energy market just as decolonisation processes were accelerating in the aftermath of the Second World War. This combination of factors meant that the political and economic constellations that underpinned global energy provision shifted dramatically.

The founder members of OPEC were Iraq, Iran, Kuwait, Saudi Arabia and Venezuela, initially the only South American country to be involved. They were joined over the course of the following decade by Qatar, Libya, Abu Dhabi, Indonesia, Algeria and Nigeria. OPEC’s interests consequently moved away from those of the previously dominant Western oil-producing countries, and also and especially from those of the big international oil concerns (notably those in the US and the UK). But there were conflicts of interest within OPEC itself, not least because of the diverging loyalties and interests of its members in the Cold War. Most of these countries were so-called “developing nations”. As such, their interest was mainly in gaining a higher share of the profits from crude oil, something that also increasingly played a role in their striving for political emancipation. This

19 *Türk*, Treibstoff, 44–45; *Abelshauser*, Wirtschaftsgeschichte, 303–305; *Abelshauser*, Ruhrkohlenbergbau, 92–93; *Karlsch/Stokes*, Öl, 317; *Bader-Gassner*, Pipelineboom, 34–35; *Kleinschmidt*, Kunststoffzeitalter, 361–368.

20 *Abelshauser*, Ruhrkohlenbergbau, 90–91; *Türk*, Treibstoff, 44–45.

had already become apparent during the Suez crisis in 1956 and later during the Six-Day War in 1967, when the Arabian oil-producing countries issued an embargo and the Suez Canal was blocked for a second time. Two years later, when the Libyan revolution brought Colonel Muammar al-Gaddafi to power, Gaddafi not only threatened to stop oil production, but also announced his intention to cooperate more closely with the Soviet Union. This represented a particular threat for Western European countries who were highly dependent on Libyan oil; at the end of the 1960s, around a quarter of all their crude oil imports came from Libya.²¹ The Libyan situation highlights how closely decolonisation was bound up with the Cold War at the end of the 1960s, not least in terms of energy provision.

In this, the Soviet Union's role was paramount, as could already be seen even at the start of the decade when the "Soviet oil offensive", as Wiebke Glässer describes it, linked economic goals—such as access to Western currencies—with geostrategic soft power through the increase of crude oil exports to Western Europe. In using oil to exert political power in this way, Russia hoped to be able to strengthen its influence on the NATO alliance. In the four years from 1958 to 1962 alone, West Germany's imports of oil from the Soviet Union increased sixfold. The price of Soviet oil undercut market rates, making it attractive not only for Western European countries, but also for "developing nations".

The Soviets were helped by a gradual liberalisation of trading conditions from the mid-1950s. At the beginning of the Cold War and during the Korean War, NATO members had put security measures in place such as the Export Control Act, the Mutual Defense Assistance Control Act and the regulations of the Coordinating Committee for Multilateral Export Controls (CoCom), with the intention of limiting trade in specific and/or sensitive goods with the Soviet Union. From the mid-1950s on, however, it was in the interest of Western European countries—including Germany—to expand their economic dealings with the USSR, so that many of these controls were relaxed. While at the beginning of the 1960s the US still sought to boycott Soviet crude oil and to embargo pipe exports, West Germany by contrast actively set about supplying pipes to the Soviet Union. These pipes eventually became the crude oil pipeline "Druzhba" ("Friendship"), transporting crude oil to various locations including Schwedt in East Germany, where it was used to provide fuel for stationed Soviet

21 Glässer, *Marktmacht*, 183–187, 208–211; Graf, *Öl*, 58–59, 68.

troops. Cheap Soviet oil was also delivered to West Germany, thus not only undermining the USA's plans for a pipe embargo, but also initiating what was to become a lengthy phase of Russia supplying crude oil—and later natural gas—to West Germany. Under the policy of *détente* practised by West Germany and the USSR in the 1970s, this dependency on Russian energy took on ever larger dimensions.²²

Thus, West Germany's "situation" in terms of energy provision underwent a dramatic change in the three decades between the end of the war in 1945 and the oil crisis of the mid-1970s, a period in which West Germany's economic boom was also gradually drawing to an end. The National Socialist Four-Year Plan had aimed at total self-sufficiency through technological innovation, political regulation and military aggression. The Federal Republic initially wanted and was able to supply most of its own energy needs domestically, thanks to its access to hard coal and lignite. But after deregulation towards the end of the 1950s, energy became a good on the free market, allowing crude oil to gain dominance over coal. By the end of the 1960s at the latest, crude oil had taken over from coal as the most important form of energy. This meant, however, that Germany was increasingly dependent on imported raw materials from various parts of the world, at a time when geostrategic alliances and enmities were taking on a new global significance in the context of the Cold War and decolonisation. This in turn meant that Germany was subject to new political anxieties as well as vulnerable to potential economic shocks.

The Transformation of the "Heuristics" and "Repertoires" from 1945–1973

Occupation (1945–1949)

In the period immediately following the war, and during the period of Allied occupation, there was little certainty for any actors involved in the buying and selling of energy. This was due in particular to legal uncertainty over who owned and controlled assets, and to the restructuring of heavy industry, the threatened dismantling of industrial operations and the urgent need to mitigate the acute coal shortages. The economy, economic growth,

22 Müller, Erdgas-Röhren-Konflikt, 505–506; Glässer, Marktmacht, 109–112, 139–145; Perovic, Rohstoffmacht, 78–106.

jobs and the rebuilding of Germany all stood or fell with the success or failure of the energy strategy. Within the coal industry itself, both employers and workers were particularly worried about the possible closure of mines and dismantling of operations in the occupied zones, which they saw as an existential threat. In 1949, a press release issued by the *Industriegewerkschaft Bergbau* (National Union of Mineworkers) highlighted the paradoxical situation in which Germany found itself. Just one year previously the Marshall Plan had set out a plan for the economic rebuilding of Europe; with this in mind, it was “not acceptable that with one hand the American taxpayer is providing the money to rebuild countries in Europe, while with the other it brings about the destruction of operations that are essential to peacetime manufacturing, thus putting the reconstruction of Europe at risk.”²³ The authors of the press release from which this quote is taken back up their argument with a further reference to “current international law” (“[das] geltende internationale Recht”) and the judgments at Nuremberg, drawing a parallel between the latter’s view of German actions during the war as “robbery and looting” (“Raub und Plünderung”) and the planned dismantling of factories and mines by the occupying powers.²⁴ Here, the potential threat to West German reconstruction is construed as a threat from the Allied occupiers, drawing an explicit parallel with the looting and theft carried out by German forces in occupied territories in the Second World War.

The operations that were threatened with potential closure were not only coal mines and their processing facilities, but also the factories established under the National Socialist policy of self-sufficiency that used the Fischer-Tropsch process to manufacture synthetic fuels. It seems clear that the coal industry assumed it would be able to continue using these factories to refine coal, albeit within the very different post-war economic framework and mainly in order to prevent the “takeover of crude oil”. At this time, however, there was no concern that “coal would ever really be replaced by crude oil

23 “[Es geht nicht an], mit der linken Hand das Geld der amerikanischen Steuerzahler den europäischen Ländern zum Wiederaufbau zu geben, mit der rechten Hand aber durch Zerstörung für die Friedensproduktion wichtiger Betriebe den wirtschaftlichen Wiederaufbau zu gefährden.” Press release of the *Industriegewerkschaft Bergbau* of 22 October 1949 on developments in relation to planned closures; original quoted in: *Martiny/Schneider* (eds.), *Energiepolitik*, 80.

24 *Martiny/Schneider* (eds.), *Energiepolitik*, 81.

in the long term”.²⁵ It was even thought that “the competition between coal and crude oil can probably never result in a clear and sustainable victory for the latter”.²⁶

Unions and managers alike continued to think in terms of energetic self-sufficiency even under the very different circumstances of occupation. The perspective in the coal industry was that such self-sufficiency was only threatened by Allied policy. This continued to be the case when it came to the social and political new order sought by the Western powers and set out in their aims and objectives for Germany after the end of the war. An important part of this new order was a general decartelisation and decentralisation of German industry. New policies, such as those embodied in “Law 75”, a decree decentralising the coal and steel industries in the Ruhr, and “Law 27”, which listed the German coal and steel industries that were to be reorganised, were seen from a German perspective as another threat to the rebuilding of the coal industry, not least because it meant breaking up the existing *Verbundwirtschaft*—the “joined-up” networking of the energy supply to different companies and factories within Germany’s heavy industry. Had this break-up been implemented, it would have caused significant technical difficulties.²⁷ Here, too, unions and managers were of one mind, seeing the Allied plans as a threat to a secure energy supply that up until that point had, from their point of view, functioned well; for them, these plans were an additional threat to reconstruction. One important difference between the companies and the trade unions, however, was that for the unions, the success of reconstruction and the reorganisation of coal mining—as indeed, the success of industrial reconstruction as a whole—depended on transforming the ownership of heavy industry altogether through the nationalisation, or “socialisation”, of key industries.²⁸

But the Allies were also concerned with energy security and the implications for international security at a moment when it was becoming clear that Russia and the West would soon be in deadlock. In this context, the

25 “Erdöl und Kohle im Wettbewerb.” Report from *Die Bergbau-Industrie*, 15 July 1949, in: *Martiny/Schneider* (eds.), *Energiepolitik*, 72. Translation: ER.

26 *Martiny/Schneider* (eds.), *Energiepolitik*.

27 Joint trade union statement on the restructure of the coal-mining industry (Second Memorandum), 29 April 1949, cited in: *Martiny/Schneider* (eds.), *Energiepolitik*, 61–62. Translation: ER.

28 *Abelshauser*, *Ruhrkohlenbergbau*, 20–29, 53–54. For reasons of space, this article will not discuss the connection between nationalisation proposals and security in more detail.

“question of coal” took on a “relevance for international security of the highest order.”²⁹ This mainly referred to energy provision based on hard coal, but against the backdrop of diverging security and foreign policy interests on the part of France, the US, West Germany and the Soviet Union. The historical research on European integration is extensive, and as such, France’s security interests in relation to Germany have been intensively analysed, as have the resulting tensions with the United States. Aware of the possibility of a Cold War, the US pursued an increasingly constructive occupational policy, building shared interests with the West occupied zones to counteract scenarios of Soviet threat, such as the demands for internationalisation of the Ruhr and the implied takeover of its resources.³⁰

Shortly after the end of the war, General de Gaulle had already warned that the economic security of the whole of Western Europe depended on the future of the Ruhr. If Germany retained control of the Ruhr and its annual coal output of 140 million tons, it would recover its economic power and once more become a threat. Germany, De Gaulle claimed, needed coal to survive, but it did not need the whole of the Ruhr and its operations.³¹ From a French perspective, then, the main concern was to ensure the secure future of energy provision in France within the framework of a foreign economic policy aimed at ensuring safety from a new German threat. From this point of view, the key to security was to control Germany, the West German economy and West German energy resources. Uwe Röndigs speaks in this context of “security through division” (“Sicherheit durch Teilung”), based ultimately on ideas of a collective security structure for the Ruhr. These ideas eventually came to fruition in the laws mentioned above, which aimed at decentralising the Ruhr mining operations, and in the Schuman Plan in 1950.³²

In terms of energy security at the national level, security heuristics during the period of occupation were mainly about various interests in relation to supply and control. These interests saw Allied interventions as a threat to the rebuilding of Germany, and as such, this thinking was still based on an assumption that energy provision was a problem to be solved at the national level. But on the Allied side, particularly on the part of the French, Germany was still seen as a potential threat in a period when other serious

29 Röndigs, *Globalisierung*, 73.

30 See e.g., Brunn, *Einigung*, 34–42; Petzina, *Wirtschaft*, 495–497.

31 De Gaulle in *The Times*, 10 September 1945, quoted in translation in Röndigs, *Globalisierung*, 73.

32 Röndigs, *Globalisierung*, 74–75.

external threats were becoming apparent in relation to the international order; an order that would ultimately, in the form of European integration, prove advantageous for West Germany.

From these security-relevant *situations* arose specific behaviours and problem-solving strategies which we may call *repertoires*. During the period of occupation, these were characterised by three main features. First (1), the Allied occupying powers were the only powers that could take decisive action in Germany at this point. As a result (2), solutions to energy supply problems had to be international in scope. Finally (3), it was gradually becoming clear that the West German energy supply had to diversify.

On the first point: A reliable supply of energy in the occupied zones was a basic prerequisite for economic recovery and rebuilding after the war. As such, the occupying powers had an interest in ensuring that West German coal-mining operations could resume as swiftly as possible. This was done through the creation of new institutions such as a German administration for the Ruhr mines, the “German Colliery Management” (*Deutsche Kohlenbergbauleitung*, DKBL). These, however, were ultimately controlled by the Allies, who also restructured the economy of the Ruhr through Laws 75 and 27. Further actions such as the European Recovery Program and currency reform created the framework conditions for a (comparatively) free-market approach to coal-mining. This, however, could not mitigate coal shortages in the short term, meaning that further directive and mandatory measures had to be put in place to ensure that the limited resources could be distributed reliably in order to meet demand both domestically and abroad.³³ Although the enforced export of coal to other European countries was criticised from the West German side as amounting to reparations by another name, the Allies’ management of the energy supply did much to ensure political security through helping to avoid a similar situation arising as after the First World War, when the enormous reparations demanded by the Treaty of Versailles had led in the short term to the occupation of the Ruhr and in the middle term to the instability of the Weimar Republic.

On the second point: These “repertoires” demanded an international approach to energy supply issues that respected the diverging interests of the West German occupied zone and the Allies, and the differing interests of the Allies themselves. The Marshall Plan played the greatest role in this, not least in relation to coal. In 1949 and 1950 respectively the proportion of

33 Abelshauser, Ruhrkohlenbergbau, 50–57, 64–70.

gross capital investment financed through the European Recovery Program was 47 percent and 40 percent, far more than the figure for West German economic participation in the Marshall Plan overall (6.4 respectively 7.4 percent). Considering that 14 percent of the investments of the West German energy companies were financed through the ERP in 1949, rising to 24 percent in 1950,³⁴ it is safe to say that one of the objectives of the Marshall Plan, at least in its first years, was also to ensure reliable energy provision in the West zones. The creators of the Marshall Plan had multiple factors to take into account: West German mandatory coal exports, like the provisions of the “Minor Marshall Plan”, as it was known, were intended to strengthen intra-European economic aid along with trade, payments and offsetting transactions.³⁵ As such, the Marshall Plan was an international programme aimed at creating “security through integration”,³⁶ not least in regard to the energy supply, and as such represented the opposite of the self-sufficiency that had characterised German energy provision just a few years before. Thus it can be said that “in the years from 1947 to 1949/1950, the need for security encouraged cooperation in the sphere of energy provision and this cooperation created more inner stability and outward security for the West European nations.”³⁷

On the third point: In this “situation”, energy provision security was predominantly a question of coal security; the uncertainties named above were predominantly based on the “coal emergency”. But West Germany was also beginning to turn its attention to alternative energy sources, something its coal industry initially saw as a threat. This was especially true in relation to crude oil, which also played an important role in the Marshall Plan. The Plan foresaw not only imports of crude oil and machinery to the West zones, but also a significant expansion to German and European refinery capacities, from which not only German, but also American and British oil concerns were to profit. Esso and Shell, for example, both applied for subsidies under the Marshall Plan for the purposes of building new refineries in West Germany in which the German companies DEA and Wintershall were shareholders.³⁸ DEA, Wintershall and Olex-Deutsche BP were West German companies that cooperated with Allied companies to create a West

34 *Abelshauser*, *Ruhrkohlenbergbau*, 66–67.

35 *Abelshauser*, *Wirtschaftshilfe*, 212–224.

36 *Krüger*, *Sicherheit*.

37 *Krüger*, *Sicherheit*, 171. Translation: ER.

38 *Karlsch/Stokes*, *Öl*, 258–263.

German crude oil industry. The Deutsche Vacuum Oel AG (DVOAG, later Mobil Oil) even sought to collaborate with the coal industry by entering into a cooperation agreement with their long-term distributor for synthetic fuels since the 1920s, the Benzol Association. In spite of the dominance that hard coal maintained in energy provision immediately after the war, this was an important step towards the creation of a West German crude oil industry. Such an industry would also be able to use facilities for synthetic petroleum production that dated from the German war economy and the Nazi policy of self-sufficiency, and thus make a significant contribution to diversifying the West German energy supply.³⁹

1950s

The question of energy provision became more urgent at the beginning of the new decade. As the 1950s progressed, it would become clear that energy provision in West Germany was increasingly determined by external influences, bringing a corresponding dependence on foreign sources of energy. This was a catalyst for discussions about West German energy policy and the security of its energy supply, which, as time went on, could no longer be viewed independently of the international and global constellations that determined energy provision nor of foreign affairs and the wider economic changes happening in the world. In this, the Korean War played a central role. This moment, however, also saw a marked change in the perceptions and attitudes of the Western powers in the context of the Cold War and the Korean War. Now that their attention was freed up from the immediate existential demands of the post-war situation in Europe, politicians could turn their focus from economic security to the military threat posed by the Soviet Union.⁴⁰ Military security and energy security were increasingly seen by decision-makers as two sides of the same coin.

In cabinet meetings, the German chancellor, Konrad Adenauer, called the coal shortages one of the most pressing issues of the day. Finance minister Ludwig Erhard believed that the Korean War was one of the major causes for the deteriorating coal situation, while Franz Blücher, the federal minister for the Marshall Plan, spoke of a dangerous development in the global market for raw materials, which he increasingly saw as a

39 *Karlsch/Stokes*, Öl, 263–274.

40 *Krüger*, Sicherheit, 156.

pan-European problem. The various ministries were united in bemoaning the supply issues, agreeing that sufficient coal for domestic households had to be maintained even if this came at the price of an inadequate coal supply to the economy as a whole. The federal minister for transport saw a potential threat to the coal reserves that were needed for the German Federal Railway, while Blücher raised the difficulty of heating hospitals and clinics adequately without sufficient fuel.⁴¹

How did the federal government respond to the energy crisis at the beginning of the 1950s? What measures were taken to secure the energy supply? As early as 1949, Ludwig Erhard, as “Director of Economic Administration”, had overseen legally binding emergency measures to ensure the electricity and gas supply. A year later, the federal government passed the *Energienotgesetz des Vereinigten Wirtschaftsgebiets* (Emergency Energy Law for the United Economic Territory) with the aim of easing supply bottlenecks. In the short term, hard coal imports from the US also helped to mitigate supply problems. But the US administration was keen for the German government to revert temporarily to a planned economy in response to the international raw materials and energy crisis during the Korean War. Erhard was against this, as he believed that it threatened his efforts to implement a social market economy, a project he had thrown everything behind since the end of the 1940s. Following intensive discussions on the economy and security in 1952, the so-called *Investitionshilfegesetz* (Investment Help Act, officially the *Gesetz über die Investitionshilfe der gewerblichen Wirtschaft*, “Act on Financial Assistance for the Business Sector”) was passed. The aim was to strengthen German industry’s ability to regulate and finance itself through investment within a market framework.

41 Minutes of plenary proceedings in the Bundestag, 151st cabinet meeting on 5 June 1951, in: *Booms*, Die Kabinettsprotokolle, Stand der Entflechtung und Kohlenlage. URL: https://www.bundesarchiv.de/cocoon/barch/0000/k/k1951k/kap1_2/kap2_42/para3_1.html?highlight=true&search=kohlenkrise&stemming=true&field=all#highlightedTerm (Accessed August 22, 2023); Minutes of Cabinet meeting 1951, 117. Minutes of cabinet meeting on 19 December 1950, A. Stand der Entflechtung und Kohlenlage. URL: https://www.bundesarchiv.de/cocoon/barch/1000/k/k1950k/kap1_2/kap2_90/para3_12.html#d8e83 (Accessed August 22, 2023); 120th cabinet meeting on 8 January 1951, A. Kohlenlage URL: https://www.bundesarchiv.de/cocoon/barch/1000/k/k1951k/kap1_2/kap2_2/para3_17.html (Accessed August 22, 2023); Minutes of plenary proceedings in the Bundestag, 119th cabinet meeting on 4 January 1951. The international situation on raw materials. Securing raw materials imports for Germany URL: https://www.bundesarchiv.de/cocoon/barch/1000/k/k1951k/kap1_2/kap2_1/para3_3.html (Accessed August 17, 2023).

Around 130,000 businesses put a total of 1.16 billion Deutschmarks (DM) into the economy. The money was used to subsidise various bottleneck sectors, including electricity, gas and hard coal. The hard coal industry alone received 228 million DM.⁴²

The Investment Help Act was the expression of an economic and political “repertoire” which West Germany would increasingly use to resolve economic problems. It followed a corporative pattern, leading to ever-closer cooperation between the economy, businesses, the state and various non-profit organisations. This entanglement of interests, according to Werner Abelshauser, was something that had characterised German economic politics even in the nineteenth century, simply taking a new shape after the creation of the Federal Republic of Germany. In regard to the Investment Help Act, Abelshauser speaks of a “return to a corporative market economy”, which as such was also highly relevant for ongoing energy provision and energy security.⁴³

But against the backdrop of the Korean War and the coal crisis, the Investment Help Act was to have unintended consequences. The boosting of the coal-mining industry would prove to be a poisoned chalice. Although it helped in the short term, in the middle and long term it meant supporting a failing industry and thus laid the foundations for the industrial structural crisis of the late 1950s. The problem was only exacerbated by the American coal imports from 1951.⁴⁴

The need for an expansion and/or diversification of the energy basis was becoming more and more urgent, but met with strong resistance from the representatives of the domestic coal industry. Discussions on energy provision and energy security intensified in the second half of the decade in the context of the Suez crisis, the founding of the EEC and EURATOM, the mining crisis and, from 1958, the gas pipeline agreement with the Soviet Union. It was become increasingly difficult to separate national from international, and European from global interests. The transformation of energy provision led to a “situation” that was ahead of its time in embodying many of the fundamental aspects of globalisation, bringing with it all the concomitant fears and uncertainties with which we are familiar today.

The Investment Help Act entered into force at almost exactly the same moment that the European Coal and Steel Community (ECSC) was

42 Adamsen, *Investitionshilfe*, 87, 226–235; Abelshauser, *Ruhrkohlenbergbau*, 77.

43 Abelshauser, *Wirtschaftsgeschichte*, 163; Illing, *Energiepolitik*, 98–99.

44 Abelshauser, *Ruhrkohlenbergbau*, 80; Adamsen, *Investitionshilfe*, 227.

formed, representing a common (West) European energy policy, although at this point it had not formulated any joint energy policy integrating the various energy carriers. Initially, the ECSC took shape more or less in response to the Schuman Plan, which pursued European integration mainly in terms of French interests in relation to security and energy. 1957 saw the establishment of the European Economic Community (EEC) with EURATOM. EURATOM was intended to set a new tone for energy policy based on innovative nuclear technologies, but never fulfilled its promise to create a joint atomic policy. It could not compete with American initiatives and investment in nuclear power stations in Europe, and even “divided the nuclear community” (Gerhard Brunn), leading ultimately to a nationalisation of the nuclear programmes of the Western European states. It was not until Europe began to move away from hard coal and towards dependency on crude oil that a joint European energy policy began to take shape. In 1968, for example, the members of the EEC pledged to maintain specified minimum reserves of crude oil.⁴⁵

The Suez crisis in 1956 had shown how vulnerable crude oil was to supply chain interruptions and uncertainties, just as Europe was beginning to move away from coal. Simultaneously, it was hard to resist the price advantages of crude oil on the global market, especially given the constant opening up of new oil fields in the Middle East. In this “situation”, the issue of energy provision in West Germany became even more urgent, resulting in the mining crisis of 1958. This crisis triggered another fundamental debate on energy security, structural change and the social order. Heinrich Gutermuth, chairman of the *Gewerkschaft Bergbau und Energie* (Trade Union for Mining and Energy) gave a speech at the union’s General Assembly in 1958 in which he stated that “the Federal Republic of Germany is traditionally a nation of coal, and as such, has a duty to meet the country’s basic need for coal through the domestic mining industry.” This, he went on, was above all because “consumers are dependent on the fluctuations of the world market and thus bear the enormous risks associated with prices and shipping.”⁴⁶ His argument may have seemed more pertinent in the immediate aftermath of Suez, but Gutermuth was mainly referring to the increase in coal imports from the US and Eastern Europe, which he linked

45 Brunn, *Einigung*, 76–80, 124–128; Graf, *Öl*, 84.

46 Gutermuth, “Bergbauwirtschaftspolitik heute und morgen.” Speech given at the 6th General Assembly of the Industrial Union of Mineworkers in Munich from 8–13 June 1958. Cited in *Martiny/Schneider* (eds.), *Energiepolitik*, 127. Translation: ER.

to a demand that foreign coal imports should be dialled back. Gutermuth wanted more state intervention, monitoring and control in the energy sector. His demands came to a head in his claim that “the liberal system that has been tried in the coal industry has not worked.” It was nothing but “a fiction”, he said, “to assume that we have a real market economy. And it is even more fatal to try to operate an industry on the basis of market economy principles which has naturally—much like agriculture—developed to function in very specific conditions.”⁴⁷

By contrast, the federal government and especially Ludwig Erhard, supported the introduction of cheaper American coal, arguing that the coal crisis could only be resolved through the markets. Finally, at a meeting held at the Chancellery in August 1958, the representatives of the mining companies threw themselves on the side of the trade unions. Gutermuth spoke at this meeting too, repeating that “the primary basis of energy in Germany is coal, and will continue to be coal for a long time.” It went without saying, he claimed, that Germany could not expect security to come without a price attached:

*Germany already spends billions on military security. It is not disproportionate to make similar funding available to ensure other forms of security: a secure energy supply, a secure mining industry and security for the people who work there.*⁴⁸

Six months later, Gutermuth even spoke of “an economic Stalingrad in the Ruhr.” He was speaking of what was seen by the trade unions and the coal industry as economic defeat on the Rhine and in the Ruhr, along with the associated fear that mining would collapse altogether and of the mass redundancies that heralded this supposed collapse.⁴⁹

It was a fact that German hard coal—as had already been prophesied in 1949, to general disbelief—could not prevail against the ultimate victory of crude oil. Besides the German government, especially Erhard, it was mainly the chemical industry, as an increasingly important industry in the *Wirtschaftswunder* era, which pushed forward this structural transfor-

47 Gutermuth, *Bergbauwirtschaftspolitik*, 129.

48 Protocol of meeting in Federal Chancellor’s Office, cited in *Martiny/Schneider* (eds.), *Energiepolitik*, 144. Translation: ER.

49 Gutermuth, “Wirtschaftliches Stalingrad an der Ruhr.” Speech held on the occasion of mass rally of the Industrial Union of Mineworkers on 25 January 1959 in Bochum. Cited in *Martiny/Schneider* (eds.), *Energiepolitik*, 167. Translation: ER.

mation through its demand for cheap crude oil. Corporative “repertoires”, in which the West German government, industry and various associations including the trade unions all played a part, helped to shape the structural change in a way compatible with “social” principles—although the jury is still out on whether a more radically market-oriented solution, such as that later pursued by the Thatcher government in the UK, would not have eventually been more economically viable.⁵⁰

But in terms of energy security based on oil, in the mid-1950s there were good reasons to expect that there would be more than enough oil globally for many years to come, despite occasional shortages and supply chain problems. Rüdiger Graf speaks in this context of “petroknowledge”, meaning knowledge about how much oil is actually available. Such knowledge was often shot through with contingency, uncertainty and ignorance, but from the mid-1950s, especially among petroleum geologists, it was also marked by increasing optimism. This was based on a number of assumptions, above all the belief that new and more extensive oil fields would continue to be discovered across the globe, along with the belief that the necessary technologies would be developed and constantly improved to deal with them.⁵¹

This is somewhat reminiscent of the optimism about the availability and sustainability of West German hard coal in the immediate post-war period, an optimism that was over at the latest by the time of the mining crisis ten years later. The half-life of prognoses in the energy sector is extremely short. This is true whether the prognosis is negative or positive, as we can see in the case of the Club of Rome’s ideas about the finite availability of crude oil at the beginning of the 1970s.⁵² But—as is clear from the example of the West German chemical industry—the phenomenon of “petroknowledge” and the related uncertainty and contingency for energy consumers in the 1950s and 1960s did not mean that said consumers, placed in this “situation”, chose to go with the supposedly safer, but more expensive, option of hard coal. Instead, they chose the cheaper alternative: crude oil. Business decisions are always made under uncertainty. This was no less true, and was perhaps especially true, in the case of coal, given most businesses’ experience in the immediate past. In this light, a decision in this period for the cheaper and supposedly still sustainable crude oil was rational,

50 *Türk*, Treibstoff, 47–48.; see also various contributors in *Goch* (ed.), Strukturwandel.

51 *Graf*, Öl, 9–13, 45.

52 *Meadows/Meadows/Randers/Behrens*, Limits, 57–59.

especially since the Suez crisis had been successfully overcome just a few years before and had not materially affected the economy's agency.⁵³ The federal government, too, did not see the Suez crisis as a warning against increased energy dependency, but rather as confirmation of their wish to pursue a more liberal energy policy. After all, the crude oil supply had increased significantly after the crisis, and competition among the various oil concerns had led to a drop in prices.⁵⁴

Not only this, but also the expansion of the crude oil infrastructure in Europe—and thus also in West Germany—, the building of new refineries near consumer centres and a comprehensive network of commercially-managed oil pipelines across Europe seemed to promise an excellent foundation for increased energy security based on crude oil.⁵⁵

Now that oil was also coming from the Soviet Union (for example under the trade agreement on natural gas large-diameter pipes from the beginning of the 1960s, in parallel with the beginnings of the mining crisis), this was seen as an additional, welcome source of energy for West Germany, allowing the state to minimise risk through supplier diversification and thus to increase energy security. With this, the West German energy supply now finally found itself at the interface of the geostrategic interests of a variety of actors such as the US, NATO, the Soviet Union, OPEC and the (Western) European nations and the EEC.

1960s

In West Germany, it was predominantly the iron and steel industries, organised within the framework of the *Ost-Ausschuss der deutschen Wirtschaft* (German Eastern Business Association, OA), which were interested in business links and a trade deal with the Soviet Union. This interest had existed since the days of the Weimar Republic, but now, in the context of the Cold War, found itself in conflict with US expectations. After the negative experiences of the Korean War, the US Coordinating Committee for Multilateral Export Controls (CoCom) had issued strict controls on exports to the Soviet Union. These controls, however, were called into question by numerous European countries as the 1950s went on, including the UK,

53 Graf, Öl, 54–56.

54 Karlsch/Stokes, Öl, 305.

55 For a detailed discussion, see Bader-Gassner, Pipelineboom.

Italy and West Germany. From the mid-1950s, West Germany stepped up its contact to the USSR with visits and invitations, and in April 1958, one year after the founding of the EEC, a trade deal was ratified by the Federal Republic and the USSR based on the exemption of large-diameter pipes from the general embargo.⁵⁶

The West German interest in trading with the Soviet Union had grown in inverse proportion to the ability of European states, including West Germany, to rely on domestic fuel sources, especially when major oil companies were involved. The US, on the other hand, was not dependent on trade relations with the USSR. Thus, the interests of the US and Western Europe diverged significantly on this point, leading to disputes when it came to east-west trade policy. This was ultimately to lead to major economic uncertainty, mainly based on the Soviets entering the global oil market, threatening prices and profits of the big Western oil concerns such as Exxon, Shell and BP. In 1960, a report by Standard Oil raised significant security concerns over West European oil imports from the USSR, stating: "Although the Soviet oil offensive is linked to economic need, its main goal is doubtless the weakening of Western alliances and to disrupt normal trade and investment structures."⁵⁷ This claim must be read in the context of Standard Oil's considerable interest in persuading Western nations to issue restrictive measures against the USSR. Two years later, the US National Petroleum Council went even further, arguing, "The ultimate goal of the Soviet Bloc is to extend its political control, destroy freedom and communalize the world..."⁵⁸ But such concerns over security were not limited to the West. In the Soviet Union itself there was an anxiety that supplying energy to Western states at scale could lead to increased dependence on foreign, capitalist markets.⁵⁹

In the West, uncertainty was compounded by the lack of a common European energy policy under the EEC, and by the differences in opinion and conflicts of interest among the member states of Western alliances. Finally, in 1960, NATO established the NATO Study Group. This was in part a reaction to the founding of OPEC, and was concerned with ques-

⁵⁶ *Rudolph*, *Wirtschaftsdiplomatie*, 126–128.

⁵⁷ Cited in *Perovic*, *Rohstoffmacht*, 99.

⁵⁸ "Impact of Oil Exports from the Soviet Bloc, Vol. 1. A Report of the National Petroleum Council's Committee and Working Subcommittee on the Impact of Oil Exports from the Soviet Bloc. Adopted by the National Petroleum Council October 4, 1962." National Petroleum Council, Washington, D.C., 1962.

⁵⁹ *Perovic*, *Rohstoffmacht*, 101.

tions relating to the global oil market, oil exports, oil production and oil consumption and with the effects of these on NATO member states. But fundamentally, the group was unable to resolve the disagreements between NATO and the EEC regarding east-west trade relations.⁶⁰

At this period, the interests of the Federal Republic were still based on the supply problems of the post-war era. This meant that for West Germany, the possibility of sourcing crude oil from the Soviet Union represented a useful diversification of its energy portfolio. From the USSR's perspective, supplying oil to West Germany had an immense infrastructural significance at a moment when the Soviet Union was moving away from coal towards crude oil and natural gas. As a result, mutual fears of dependency cancelled each other out. This eventually led to further agreements between the USSR and West Germany over the next few years, which, however, led to further significant discord between the Federal Republic, the US and NATO. Not only West Germany, but also Italy entered into offsetting transactions with the USSR. These stipulated that the USSR would supply raw materials in return for large-diameter pipes, an agreement that was soon stymied by NATO's decision to issue a pipe embargo following the Cuban Missile Crisis in 1962. But this led to yet more conflict and soon failed, not least thanks to states not in NATO, such as Sweden, sending pipes to the USSR instead. The embargo was finally lifted in 1966. In 1970, under the policy of *détente* initiated by Willy Brandt and his coalition government, the Federal Republic entered into a further, comprehensive agreement on large-diameter pipes with the Soviet Union. In this agreement, the OA again played a decisive role, thanks in particular to Otto Wolff von Amerongen, who had been actively establishing contacts and networks in the Soviet Union since the 1920s, and to Berthold Beitz and Ernst Wolff Mommsen.⁶¹ Mommsen was both a business leader and a politician. As manager of Thyssen, and later as state secretary in the Federal Ministry of Defence, he embodied the two sides of energy security: domestic supply and military defence.⁶²

Looking at the decades-long importance of these personal networks and close links between business and politics, it is appropriate to speak of path dependencies: of personal and institutionalised experiences, and ultimately

60 *Glässer*, *Marktmacht*, 124–125, 139–145.

61 *Rudolph*, *Wirtschaftsdiplomatie*, 111–128, 155–171, 231–239; *Perovic*, *Rohstoffmacht*, 101–103.

62 *Hesse*, *Röhren-Manager*.

of an “interdependency management through cooperation”—a phrase that can fittingly be used to describe the (West) German-Soviet relations over many decades, whatever the political regime in place at the time. These experiences were based on mutual economic dependence, on a positive attitude towards the transactions and an expectation that they would be beneficial for both sides, and doubtless not least on the long-term reliability of the Soviet Union as a trading partner.⁶³

As the 1960s went on, West German energy consumption rose steeply, in line with West German economic growth. This was especially true of crude oil consumption. More than two thirds of the total oil supplied to West Germany came from foreign oil concerns. This meant dependence on imports and thus also an increased vulnerability to and uncertainty based on potential supply-chain interruptions, in an increasingly complex supply situation characterised by the diverging interests of multiple actors in the context of the Cold War and ongoing decolonisation. West German politicians, economists and business leaders were by no means unaware of this. But because crude oil was available at a low price from the Middle East and North Africa, they preferred to think that there was “no immediate cause for alarm.”⁶⁴

However, from the middle of the 1960s, the political situation in the Middle East worsened as relationships between Israel and the Arab states deteriorated. And because West Germany entertained complicated trade, development and arms arrangements with both sides, it was clear even before the outbreak of the Six-Day War that “oil supplies to the Federal Republic are threatened with a threefold political risk,” as the trade unions expressed it to the West German government.⁶⁵ By this, they meant the potential disruption to the relations between the Western major powers and the oil export countries, the conflicts between the oil export countries and the oil concerns and finally, the tensions in the triangular relationship between West Germany, Israel and the Arab countries.⁶⁶ This last in particular

63 *Rudolph*, *Wirtschaftsdiplomatie*, 235–240. The concept of “interdependency management through cooperation” is used by researchers in the field of urban sociology. See for example *Schmidt*, 77–134.

64 *Graf*, *Öl*, 75.

65 “Die Erdölzufuhr muß gesichert werden [We need to secure the crude oil supply]”. Reportage in the Trade Union Circular on Mining and Energy, May 1965, cited in *Martiny/Schneider* (eds.), *Energiepolitik*, 255. Translation: ER.

66 “Die Erdölzufuhr muß gesichert werden [We need to secure the crude oil supply]”. Reportage in the Trade Union Circular on Mining and Energy, May 1965, cited

would mean that West Germany “would not be able to protect its oil supply given the multiple potential for political conflict.”⁶⁷ This prognosis would prove to be correct—not only in the immediately following years, but up until the present day, as would become clear just two years later when the Six-Day War led, directly and indirectly, to the oil crisis of 1973–1974 and the many oil crises that were to follow.

This lent a new urgency to the need to take action to secure the energy supply, something which had been ever more apparent since at least the mining crisis of 1958, the displacement of coal as West Germany’s most important energy source and an energy policy that was increasingly based on diversification. But until well into the 1960s, West Germany’s energy security policy tended to be reactive rather than proactive, and was comparatively uncoordinated. According to Illing, the established energy policy predominantly consisted of promoting growth and industry through low prices, flanked by a few protective measures put in place mainly for the coal industry (e.g., the *Gesetz zur Sicherung des Steinkohleneinsatzes in der Elektrizitätswirtschaft* (Act to Secure the Use of Hard Coal in the Electricity Sector) of 1966, the *Gesetz zur Anpassung und Gesundung des deutschen Steinkohlenbergbaus und der deutschen Steinkohlenbergbaugebiete* (Act on the Adaptation and Recovery of the German Hard Coal Mining Industry and German Hard Coal Mining Districts) in 1968 and the founding of the company “Ruhrkohle AG” in the same year). Even under the Grand Coalition government of the late 1960s, there is no evidence of “any real policy aimed at securing the national energy supply,” despite the urging both of government representatives and national bodies.⁶⁸

Domestic hard coal and lignite was being replaced not only by American and Eastern European coal, but also and especially by crude oil from the Middle East. Natural gas was not yet widely used, and nor was nuclear energy, although the latter was of increasing interest to the US and was already being used to generate electricity there. In the Federal Republic, however, despite wide-ranging government initiatives, nuclear power was proving less popular, and indeed, was hardly relevant at this period beyond its use in reactors built for research and experimentation. The state was too concerned about how it could be financed, especially in case of any

in Martiny/Schneider (eds.), *Energiepolitik*, 255–256. Translation: ER; Kleinschmidt, *Entwicklungshilfe*, 176–192.

67 Martiny/Schneider (eds.), *Energiepolitik*, 257.

68 Illing, *Energiepolitik*, 102, 106–117, 122.

accident and potential compensation claims, and the potential need for government guarantees.⁶⁹

In terms of diversification strategies aimed at securing the long-term energy supply, West Germany was more interested in the potential of crude oil. To this end, from the late 1950s/early 1960s the state made an effort to strengthen the role of West German industry in domestic oil extraction and distribution, and to expand the necessary infrastructure for it to do so. Between 1956 and 1963, for example, crude oil extraction in the Federal Republic increased from 3.5 to 7.4 million tons, making Germany the biggest oil producer in Western Europe. Yet this expansion had little impact on the dominance of foreign oil concerns and the dependence on foreign oil supplies. Even though West German oil refineries were becoming more important, and were seen as important distributors for petrol stations owned by West German companies such as Aral, Gasolin or DEA, they were increasingly competing with foreign suppliers such as Esso, Shell or BP, who gradually increased their market share in the Federal Republic.⁷⁰

With the idea of strengthening the West German international position and expanding its influence within the EEC, from the mid-1960s the West German government and leading national oil and mining companies discussed the establishment of a national oil company. In 1966, these discussions led to the founding of the DEMINEX (“Deutsche Mineralölexplorationsgesellschaft mbH”). Its objective was to source new oil storage facilities not only at home but above all, abroad. The plan was subsidised by the government to the tune of 45 million DM, although originally the amount was to have been 800 million. But the government did not have the finance and subsidy options to keep it afloat, especially as it was already spending a considerable amount subsidising the domestic hard coal-mining industry. Another attempt was made at the end of the decade. This time, it was more successful, but DEMINEX never became the national German oil concern that was originally planned, and was only moderately successful in sourcing new sources of oil in the North Sea, Africa and Jordan.⁷¹

In summary, the 1960s can be seen as a period in which an increased awareness of and sensitivity to political and economic risk and dependencies among the actors concerned was in continual conflict with the attraction of new energy sources—especially oil—that seemed to hold out

69 Radkau, *Technik*, 355–367; Türk, *Treibstoff*, 73–74.

70 Karlsch/Stokes, *Öl*, 318–321.

71 Karlsch/Stokes, *Öl*, 359–362, 376–377; Illing, *Energiepolitik*, 96–98.

the promise of a solution to the energy supply problem. In terms of the “repertoires” available to the multifaceted world of energy provision, this led to a relatively reactive and situational problem-solving pattern. By the beginning of the oil crisis in the early 1970s, there was still no joint German or European policy on energy or energy security. As Henning Türk has shown, it was not until a few days prior to the beginning of the oil crisis, in October 1973, that the coalition government of the SDP and FDP presented an energy programme to the Bundestag.⁷²

Conclusion

Energy security is an ongoing challenge that has preoccupied Germany, the West German economy, businesses and private households for a very long time. This chapter has mainly been concerned with aspects of energy provision security and energy securitization: that is, the question of how and when energy, in the period discussed here, became a security issue. In doing so, the chapter uses the central analytical categories of “situations”, “heuristics” and “repertoires”. Between West Germany’s post-war reconstruction and the oil crisis, the “situation” for energy provision changed fundamentally as crude oil replaced hard coal as the most important energy source. This process of transformation brought with it numerous uncertainties for the actors involved. It touched on questions relating to the possibility of external agents controlling West German energy resources (e.g., under the occupation policy of the Allies), to issues of the economic order and the right to economic co-determination, on energy imports from abroad and political influence in the context of the Cold War. Within this framework, it is possible to identify an increased awareness of and sensitivity to the political and economic risks and dependencies arising out of a highly complex situation (“heuristics”), but at the same time, the actors involved were, depending on their own interests, torn between a supposedly safe reliance on the traditional energy source, hard coal, and the promises held out by new fuel sources, especially crude oil. This conflict was particularly apparent in relation to the energy imports from the Soviet Union from the early 1960s. In the Cold War era, this phenomenon met with very varied reactions; on the one hand, Soviet imports were cheap, but on the other, there was a fear that they could lead to new dependencies, as

72 Türk, Treibstoff, 75.

well as worries about security. Considering the corresponding “repertoires” in relation to “petroknowledge”—which was based on technology-oriented ideas about cheap and sufficient crude oil reserves—this led to corresponding hopes for and a focus on the future, underpinned by a diversification of the West German energy base and—in the case of the relationship to the USSR and, later, Russia—to a form of “dependency management through cooperation” that continued until 2022.

At the same time, the “repertoires” practised in the context of West German energy security represented above all reactive and situational problem-solving patterns, so that right up until the beginning of the oil crisis in 1973, no coordinated energy policy concept or energy security concept existed either for Germany or for Europe. As Henning Türk has shown, it was not until a few days prior to the beginning of the oil crisis, in October 1973, that the coalition government of the SDP and FDP presented an energy programme to the Bundestag.⁷³ However, even this did not lead to a fundamental resolution of the uncertainties confronting West German energy provision.

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73 Türk, Treibstoff, 75.

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