driven by the aim to liberalize and establish one common energy market. Europe of the twenty-first century appears to realize the merits of solidarity in achieving comprehensive energy security, and it has come a long way since founding the European Coal and Steel Community in 1952. Speaking with one voice on energy, however, remains just out of its reach. How Europe has approached integrating the three dimensions of its energy policies and what explains that process is the subject of the next chapter.

Chapter 3

The Changing Nature of EU Energy Policy: Theory and Milestones

The EU's conception of energy policy has transformed over time, reflecting the continuously changing debate of the Union's competences and functions and its theoretical understanding. Given that energy policies are 'product[s] of the interaction of material and technological factors with political ones' (Prontera 2009: 1), its analysis must always be contextualized, that is, put into the right historical context. For example, the supranational–intergovernmental dynamics of integration in the aftermath of its failed attempt to pass a constitution, as well as the dramatic repercussions of the financial crises hitting the Union hard since 2008, and the new tensions between Russia and the EU have played an important role in structuring its energy objectives – member states have simply become more reluctant to transfer more competences to the supranational level while at the same time publicly calling for a new Energy Union. Furthermore, given Europe's dependence on foreign energy sources and their changing form and nature, the global nature of energy questions needs to be considered. Indeed, energy politics is a field where the butterfly effect is not only a common trope but a fact. Embedded into changing global flows of energy, reaching from US shale gas extraction to Canadian tar sands, from Australian LNG to Japanese nuclear power, from the exploration of the Caspian Littoral to Turkish pipeline projects, the Union seems more of an outfielder than a pitcher.

Theoretical perspectives

The history of the Union's energy policy shows a protracted struggle over competences between the supranational institutions, member states, and energy companies driven by business interests. While

this may not be different from other policy fields, which slowly drifted towards the supranational realm and were thus 'communitarized' with all the legal implications, energy policy is unique because of the strategic importance the member states attach to it. Building up national champions was the logical step to take, since the constant supply of energy at affordable prices was not yet a question of slowly depleting reserves or environmental concerns. The European Commission's liberalization agenda, which was enshrined in the treaties signed by the member states, had to clash with those national champions. Strategic goods are usually exempted from deregulation. However, the rising environmental agenda and the external shocks showing the finite nature and instability of fossil fuel supply, contributed to a slow opening up of hitherto national energy markets. The lengthy nature of this process can be explained by the existence of powerful national champions, the fact that energy as such is a highly lucrative market with lots of money changing hands and lots of hands being involved (be it lobbies, consumers, or politicians), and the different forms of energy supplies upon which the member states were relying.

The simplest way to look at the changing nature of the EU's energy policy is to look at: (1) the distribution of competences, (2) the overall legislative output over time, and (3) the specific subfields within the energy sector in which legislation was passed (Brutschin 2013).

Contrary to the institutions of the member states, the EU can only act if the member states have transferred competences. This competence transfer is based on the legal principle of conferral. Art. 5 TEU stipulates, 'the Union shall only act within the limits conferred upon by the Member States in the Treaties to attain the objectives set out therein'. As will be shown in the history sections, the EU treaties did not transfer any energy policy competence to the supranational level prior to the Treaty of Lisbon. The term 'energy' itself was only found in three articles (Art. 3, 154, 175 ECT) in the Maastricht Treaty, something which is all the more astonishing given the fact that two of the three EU founding treaties explicitly deal with energy: Euratom and the European Coal and Steel Community. The lack of competence in establishing primary law did not impede the European Commission from initiating European legislation, but it had to rely mainly on regulations pertaining to the establishment of the single market (Art. 114 TFEU), the flexibility

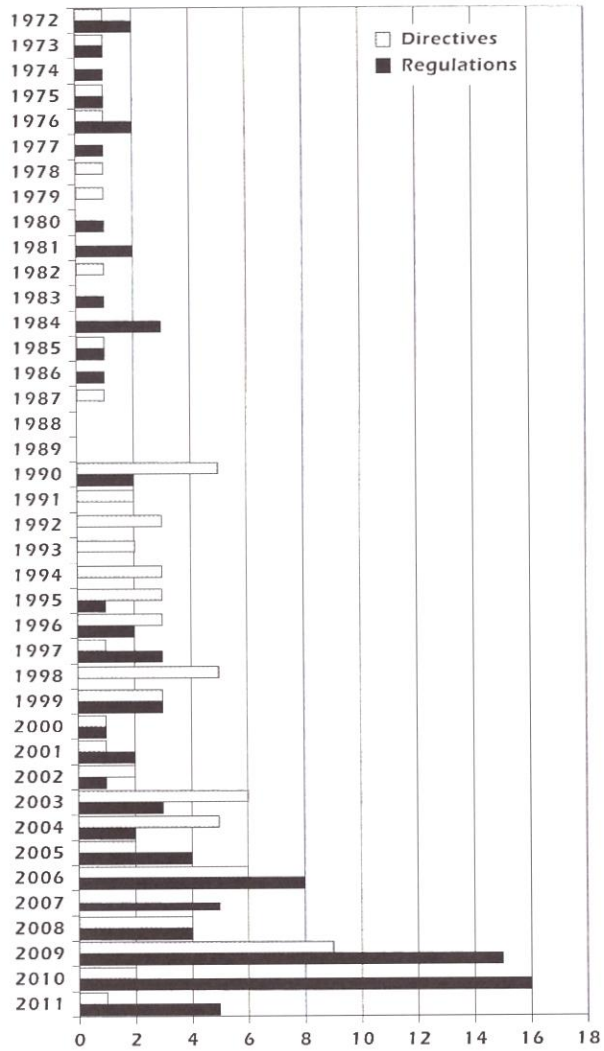
clause (Art. 352 TFEU), and general competition law (Art. 101–106 TFEU). It was only in the Treaty of Lisbon that an energy chapter was included and objectives for an integrated energy policy – to be achieved in the spirit of solidarity – were formulated. It is not surprising that those objectives were rather vague. Defining, for example, in which cases the solidarity clause should be applied and which specific mechanism would kick in, would prove to be next to impossible. Without doubt, the energy chapter in the Lisbon Treaty has a political significance that reflects the increased importance of the energy issue for the EU.

The second, simple means by which to assess the changing nature of the EU's energy policy is to look at secondary legislation. The most important legislative acts are regulations and directives. Whereas as regulations are immediately enforceable, directives (usually) have to be transferred into national law (Art. 288 TFEU), that is, directives leave the means to achieve an objective at the discretion of the member state. Figure 3.1 shows the frequency of directives and regulations in the energy sector from 1972 to 2012. It becomes clear that secondary legislation in the energy sector has grown substantially over the years.

In addition, Figure 3.1 shows that from the early 1990s onwards, there was more legislation in the form of directives, allowing more legislative freedom for the member states to achieve the adopted objectives. However, in the wake of the so-called Third Energy Package in 2009, more regulations than directives were passed, signalling that the legislation is getting stricter, leaving member states with almost no legislative leeway.

Given its nature as a strategic good and the huge import dependence of the EU shown during the two oil crises in the 1970s, a closer look at the legislative acts passed in the subfield of energy security shows the changing understanding of what constitutes energy security. In the 1960s and 1970s energy security was mainly understood as security of supply. Over the years, however, two additional dimensions gained importance: competitiveness (affordable prices) and sustainability (environmental issues) (Ciuta 2010). Figure 3.2 shows that until 1996, the majority of the directives and regulations focused on the security of supply, such as restrictions on the imports of crude oil and natural gas. However, since 1998, measures related to the internal market – a tool for increasing competitiveness – and sustainability were on the rise (Brutschin 2013).

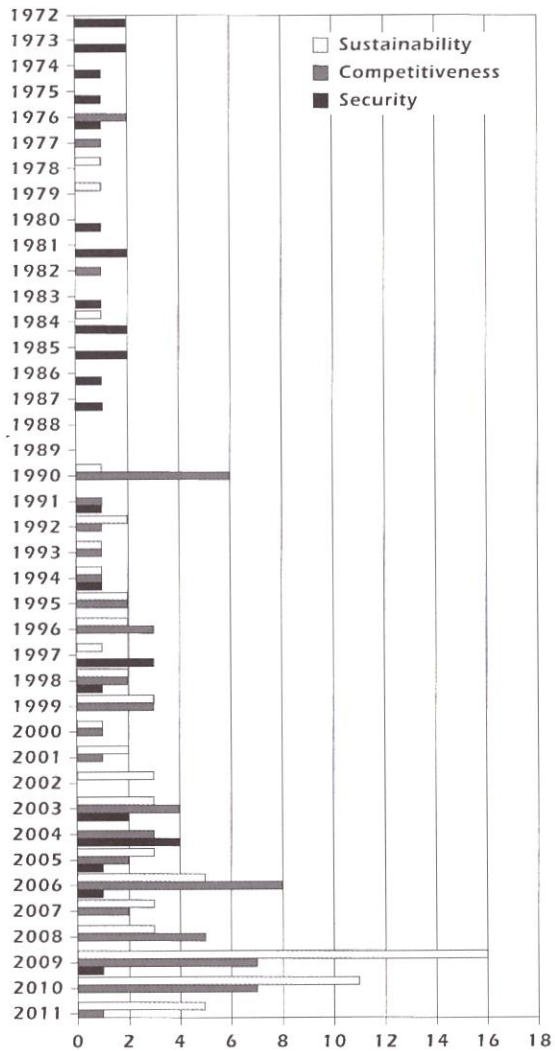
Figure 3.1 *Frequency of directives and regulations 1972–2012*



Source: Based on Brutschin (2013: 5)

How can we theoretically frame those conceptual changes reflected in the shift of competences, the number of legislative acts, and the changing substance of regulation? One approach focuses

Figure 3.2 *Directives and regulations by policy area*



Source: Based on Brutschin (2013: 6)

on member states being the main drivers of the development of the European energy policy. In 1997, Matláry offered an analysis of the period 1985–1995 by applying Putnam's two-level games framework.

She concludes that the deadlocks in European energy policy can be explained by the dominance of national interests. However, she admits that progress can be achieved through the Commission, which sometimes uses its power 'in defining the agenda, the stakes and the outcome' (Matláry 1997: 150). Indeed, the national interests of France and Germany are seen as the main brake to the further communitarization of energy policy (Dreyer et al. 2010, Eising and Jablko 2001, Geden and Fischer 2008, Haase 2009, Lyons 1998, Nowak 2010, Padgett 1992). The main reason for the widely different interests between the two countries lies in their respective energy market structure. While GDF Suez SA has a virtual monopoly in France, we find an oligopoly with four major companies in Germany: Eon, RWE, Vattenfall, and EnBW (comp. Geden and Fischer 2008). Such an interpretation falls squarely into the realm of Classical Intergovernmentalism, an integration theory that posits that any progress in the process of European integration mainly depends on the interests of the powerful member states. Supranational institutions are but mere tools of those member states (Hoffmann 1966, 1982; Milward 1984, 1994).

Andrew Moravcsik's (1993, 1998) Liberal Intergovernmentalism draws attention to the domestic bargaining processes which take place before a policy is negotiated at the supranational level. Governments are agents of this domestically agreed position and try to achieve an outcome closest to their national preferences. Of course, national governments try to optimize their strategies, always conscious that a further transfer of powers to the European level equals a loss of power for themselves. Thus, state behaviour is determined by costs and benefits of economic interdependence (Moravcsik 1993: 480) and supranational institutions serve as facilitators, but much less so as shapers of European policymaking. Matláry (1997) used the frame of Liberal Intergovernmentalism to analyse and explain the outcome of the First Energy Package (1996–1998). It turns out that Moravcsik's approach serves well for the 'grand bargains' (i.e. treaty negotiations), but it is problematic to apply to day-to-day policymaking. The assumption that actors can clearly distinguish between domestic and international levels and that states serve as gatekeepers cannot easily be confirmed. Rather, preferences are shaped at both the European and domestic levels (Schmidt 2000). Under certain conditions the European Commission or interest groups can exert a very strong influence on negotiations.

Thus, European institutions matter. This is also very much the central assumption of theoretical approaches subsumed under the heading of Institutionalism. Rational Choice Institutionalism (Franchino 2007, Tsebelis 2002), similar to Liberal Intergovernmentalism, assumes that preferences are exogenous but that institutions could lead to a 'structure-induced-equilibrium' through certain institutional arrangements, such as decision-making rules (Pollack 2010). According to this approach, both the Commission and the member states shape the outcome of negotiations, but it depends on very specific interest constellations in order for integration to progress. Sociological Institutionalism argues that preferences should be understood endogenously, and that EU institutions can shape them directly, or largely influence them by EU norms and laws (Christiansen et al. 1999: 539). Within the energy context, Rational Choice as well as Sociological Institutionalism have mainly concentrated on the role of the Commission and its legislative powers that can serve as a credible threat to induce more integration (Pollak and Slominski 2011; Schmidt 2001).

Schmidt (1996: 6) argues that an 'orientation toward the dominant theoretical dichotomy blinds one to the multiple effects between supranationalism and intergovernmentalism in what should be more appropriately conceptualized as a system of multilevel governance'. The most important contribution from configuring the EU as a multilevel system is that it allows for a multiplicity of actors, beyond member states and supranational institutions. Interest groups, lobbyists, companies, etc. all try to influence the policy process according to their own preferences. Thus, energy politics becomes a highly complex field in which the interests of supranational, national, and international state and non-state actors are played out. A large number of actors can lead to increased stability according to the veto player theory by Tsebelis (2002). New members (e.g. new member states) may increase the heterogeneity of preferences, but that also means that the status quo is more difficult to change (i.e. stability increases). On the other hand, a larger group of players also eases coalition-building by opening up new possibilities.

A suboptimal policy outcome can be well described by Scharpf's 'joint-decision trap' approach (1988). The European policymaking process is explained not as a result of the widely differing preferences of the member states but as a 'characteristic pattern of policy choices under certain institutional conditions' (Scharpf

1988: 242). The main assumption is that transaction costs grow with the number of actors (Scharpf 2006), and the higher the transaction cost the less likely an agreement becomes. As tempting as the logic of this theoretical approach may seem, Scharpf excludes a central player in his argumentation, namely the European Commission, omitting its role as a key agenda-setter (Scharpf 2006: 850). If the Commission is able to control the flow of information, then adding new members to the negotiating table should not significantly change the speed of decision-making (Brutschin 2013; Kearns et al. 2006). In a revision of his original approach, Scharpf suggests that the 'possibility of "intelligent design" may allow the Commission to present creative proposals that go beyond the trivial exploitation of fixed policy preferences suggested by the role of the agenda-setter in spatial voting theories' (Scharpf 2006: 850).

In the context of energy policy, Intergovernmentalist approaches clearly favour the member states as key actors in the development of the policy field. Whatever the Commission was up to, the member states and, in the case of Liberal Intergovernmentalism, key actors within the member states were acting as the sluice gates through which all Commission proposals had to pass. Institutionalist approaches emphasize the independent role of the supranational institutions, especially the European Commission. Without its constant probing, insisting on the deregulation and liberalization of a highly regulated and protected national field would have never made the progress it has seen over the recent years. Although all the member states were veto players at one point, the significant changes in the primary law of the European Union forced them to live up to their well-trained rhetoric at summits. They are no longer the sole masters of their respective energy fates.

Milestones of European energy policy

The remainder of this chapter explains the evolution of the EU's energy policy from its ambitious and rather successful beginnings to the ambiguity of more contemporary times. It explains how progress towards an integrated European energy policy ebbed and flowed, indicating the crowning achievements as well as the policy failures and the many hiatuses experienced across decades of progress. Instead of looking merely at a single timeline, we approach the development of EU energy policy from the perspective of its path-dependent phases. We demonstrate how the Commission exploited external events in its role as a policy entrepreneur and how the foci of Europe's energy debate vacillated over time between four important themes: the importance given to defining energy resources as strategic commodities at both the national and supranational levels; how and when efforts to deregulate and liberalize various energy markets changed the rules of the game; how the acquisition of sustainable and secure supplies from abroad came to drive many current policies; and how environmental politics arose as an integral part of the Union's energy politics.

We begin by addressing the early phase of European energy policy, from its inception in 1951 to the early 1970s, during which phase Europe focused on securing the basics to both reconstruct its industrial base in the aftermath of World War II and meet its goal to supply European consumers with affordable energy. That process fuelled what has become known as the so-called 'European economic miracle'. It is a phase where the dynamics between the member states clearly dominated the entire integration process. We continue by examining the impact of the two oil crises of the 1970s (1973 and 1979) and the Chernobyl disaster (1986), analysing their role as external shocks triggering further integration. We then turn to the liberalization agenda that dominated EU economic efforts from the early 1990s, before we describe in the final section, the two most recent challenges to an integrated EU energy policy: supply security and climate change. This development of the EU's energy portfolio reflects the major theoretical approaches described above. While in the early years of integration the member states very clearly were the key players, sidelining the High Authority of the ECSC where they deemed necessary, the European Commission later proved very capable in driving the energy portfolio by pointing to the objective of the Common Market – an objective shared by all member states – the increasingly important environmental topics, and today the dominating issue of energy security. Along the way governments, EU institutions, key industrial players, and societal forces were struggling to maintain, increase, or hide their influence on Europe's energy politics. External events very much defined the universe of this policy field. The chapter concludes with an analysis of the EU's 2050 Roadmap and its implications.

The early years: Securing the basics

On 18 April 1951, six European nation states – Germany, France, Italy, The Netherlands, Belgium, and Luxembourg – signed the so-called Treaty of Paris, establishing the European Coal and Steel Community (ECSC). They agreed to abolish all tariff and non-tariff borders in the trade of coal and steel and transfer all authority concerning investment subsidies, price and market regulation, as well as the establishment of a common market to a new committee consisting of nine members, called a High Authority. The ECSC High Authority was the forerunner of today's European Commission. The treaty, which entered into force on 1 February 1953, foresaw a five-year transition phase in which it would continue to allow national subsidies and regulations. Its main objective was not to establish a common energy policy, but rather to integrate German and French heavy industries into a common market, in order to secure cooperative European reconstruction.

Why was so much focus placed on coal and steel? The answer lies in their respective importance to each other. Reconstruction required enormous amounts of steel, and in order to produce steel one needs coking coal. Meanwhile, successful reconstruction would bring about increased demand for electricity, the generation of which in turn required large amounts of boiler coal. The underlying rationale is simple enough. France needed German coal for its steel industry. Germany, whose steel production was booming back to pre-war levels, needed the ECSC to once again become a respected member of the international state community. Both countries needed a great deal of coal and steel to reconstruct, and both materials were regarded as key components of the industry of war. Removing sovereign control over these vital national resources and transferring it to a neutral bureaucratic agency would guarantee mutual economic gain and a peaceful continent. Jean Monnet, one of the founding fathers and the first president of the High Authority, was not alone in hoping that success in one area would spill over into others, an idea conceptualized by functionalist integration theories.

From an economic perspective, the ECSC was only a limited success. Its far-reaching hopes and expectations could not be met. When the unusually warm winter of 1958/59 led to a decline in coal consumption, and therefore to a large surplus, France and Germany reacted in precisely the manner that the ECSC Treaty prohibited, namely by putting up import restrictions to protect their respective national industries. The High Authority simply lacked the power to enforce the treaty. Until the early 1950s, coal occupied an undisputed lead position (almost 90%) in the primary energy supply of the six founding states. By the mid-50s, however, it became clear that the European coal-mining industry could not compete with cheap overseas supplies. It could not stop the meteoric advance of petroleum that was flooding the international energy market either. Consequently, the ECSC Special Council of Ministers and the High Authority openly called for considering a coordinated energy policy (Special Council of Ministers 1957).

In the wake of the 1954 failure to establish the overly ambitious European Defence Community and Political Community, the foreign ministers of the Benelux countries came forward with an important memorandum. The so-called Benelux Memorandum set the tone for the next step of integration by supporting Jean Monnet's idea of an atomic community, one that would provide cheap energy to meet rising demand and thereby reduce costly petroleum imports. Not all the member states were convinced about the merits of such an atomic community, so Jean Monnet suggested linking it with a much broader economic community. Paul Henri Spaak, the Belgian foreign minister (and president of the first Common Assembly of the ECSC), was tasked with hammering out the details of the two communities in an expert group. Despite a multitude of diverging positions, Spaak managed to present a report after only eight months (April 1956), the third part of which singled out energy as an important area of supranational regulation. Progress was sudden and swift. Negotiations between the six ECSC founding members started in May 1956. Most of the opposition to the planned atomic community disappeared after the Suez Crisis in November, which raised doubts about the degree to which Europe could trust oil deliveries from the Middle East. By early 1957, the parties had come to an agreement and on 25 March, signed the Rome Treaties, founding the European Economic Community (EEC) and the European Atomic Community (EAC). Both treaties entered into force on 1 January 1958.

The Euratom treaty had multiple objectives. First, joint research programmes should guarantee an efficient and peaceful use of nuclear energy. For example, the Joint European Torus (JET) agreed upon in 1972, which, later in 2000, became part of the European Fusion Development Agreement (EFDA). Another example is the International Thermonuclear Experimental Reactor (ITER) project,

which aims to build the world's largest nuclear fusion reactor in Cadarache, France. Second, it should facilitate developing and implementing common safety standards for the protection of the population. Third, it should provide investment capital for the construction of nuclear power plants, since the costs for doing so were prohibitive; and once those plants were built, they would need to be provided with fissile material in the form of fuel rods. Thus, the fourth objective was to supply such rods, for which a special agency was created in June 1960, known as the Euratom Supply Agency (ESA), which to this day still holds the property rights over all fissile material in the EU and is responsible for its distribution. To ensure that no fissile material is diverted to military use, the member states agreed to install a rigorous control system exercised jointly with the International Atomic Energy Agency (IAEA).

Despite the sense of unity, the member states diverged in terms of their views and expectations about Euratom. One example of this concerned the selection of the reactor model. While France preferred a (somewhat less efficient) model working with naturally enriched uranium, abundant in its Western African ex-colonies, Italy and Germany put their trust in American technology, which functioned with artificially enriched uranium. For France, which was planning its own nuclear military capability, such a dependence on American technology was unthinkable. Meanwhile, the US offered to provide cheap uranium rods and the necessary reactor technology, but rejected the idea of an independent European nuclear arsenal. They demanded that the Europeans abstain from building their own uranium isotope separation plant in exchange for US technology. The argument ended when the US signed a treaty with Euratom to build six nuclear power plants with American money and technology. The final arrangement prompted the then recently elected French President Charles de Gaulle to call Euratom the most infamous treaty France had ever signed.

Euratom was never able to reach the importance of the EEC, even though experts in the 1960s actively discussed atomic energy in terms of a third industrial revolution. The combination of competitive crude oil prices in the early years of Euratom's existence, the division between France and the other member states over whether the nuclear industry should be state-controlled or left to the free market, and clear conflicts of interest between France and the other member states weakened its political importance. A deeper look into the treaty text reveals some of these differences. For

example, whereas Article 52 of the treaty stipulated that only the ESA was entitled to buy fissile material, Article 66 provided for special circumstances under which the member states could buy the material independently with the approval of the Commission. Another point concerned joint research projects and the exchange of technical information, where France insisted on the right to far-reaching confidentiality when national security was concerned (see Articles 24–27, 84).

The Suez Crisis in 1956 provided the first, albeit missed, opportunity for the High Authority of the ECSC to extend its competences in the fields of oil, gas, and electricity. Its failure to successfully seize the moment reduced the High Authority's importance almost as fast as coal lost ground as the primary energy source. By 1967 coal accounted for only 35% of total primary energy supply and in 1969, oil replaced coal as the most important source of energy. In short, the ECSC's primary objective to guarantee equal access to cheap coal for all member states lost its relevance. Consequently, the Community gradually began to loosen its prohibition on state aid for the extraction of coal, a step that was deemed necessary to mitigate the negative social consequences of mine closures in the German Ruhr area.

Three crises, all in the Middle East (the 1956 Suez Crisis, the 1967 Six-Day War, and the 1973 October or Yom-Kippur War) revealed the unsustainable depth of member-state dependence on Arab oil, leading them to push the Commission to work out suggestions for the further development of a European energy policy. In response, the Commission prepared a number of important documents (e.g. European Commission 1968, 1972, 1973) in which they envisaged the creation of a common market for energy, including a strategic role for nuclear energy. One outcome resulting from the Suez Crisis, for example, was an agreement to establish strategic reserves, leading to the 1968 directive obliging the member states to maintain minimum stocks of crude oil and petroleum products for 65 days (Council of the European Communities 1968). Beyond this directive, however, the member states could hardly find common ground on any other energy-related issue (Hofer 2008: 39).

Despite the fact that the ECSC, Euratom, and EEC each addressed energy-relevant policy questions and the member states unanimously agreed on their importance, too many obstacles prevented the early creation of a community-wide energy policy.

Already, in its first general report (September 1958), the Commission of the EEC demanded community-wide energy coordination. It subsequently established a working group (25 May 1959) tasked with hammering out suggestions for enhanced coordination and, based on its suggestions, published a detailed report in December 1962 on the future of Europe's energy economy. Only through the tenacious efforts of the supranational institutions, particularly the High Authority and the European Commission, did the member states sign a protocol on an *Agreement on Energy Questions* in April 1964 (Special Council of Ministers 1964), in which they accepted the importance of a common energy market and emphasized their will to create a common European energy policy (Grunwald 2003). The High Authority of the ECSC and the Commission of the EEC were merged on 8 April 1965 in the so-called 'Merger Treaty'.

The development of such a market was negatively affected by a number of conditions. First, energy, due to its specific physical characteristic concerning its production and distribution, is difficult to compare to any other tradable commodity and, thus, requires specific rules and special regulations, which in turn were easier to create at the domestic as opposed to supranational level. Second, energy was (and still is) regarded as a strategic good (Prontera 2009), and because nation states favour national energy champions rather than opt for integrated, transnational approaches, each member state promoted its own vertically integrated utilities. These two factors resulted in the establishment of national energy giants that controlled the entire gamut of the energy industry, from production to transport and delivery. Third, integration was further complicated by the fact that energy is disproportionately subject to technological and scientific advancements. Simply stated, it cannot be predicted when and in which countries scientific and technological breakthroughs will occur. Thus, divergent and sometimes contradictory technological choices were made by member states, which among other things led to different primary fuel mixes and commensurate, sometimes competing, political objectives that years later further complicated the pursuit of integration. Finally, it was very clear from the onset of the European project that the energy sector had a high degree of interdependence with other policy sectors (e.g. competition, external relations, transport, industry, and environment). Therefore, energy policies were often deemed either as a subset of other policies or of such a macro scale that they

could not be tackled all at once, further sapping support for full integration of national energy markets because they might negatively impact other key national industries.

Despite the commitment to build a common energy market based on the four freedoms (free movement of goods, persons, services and capital), the EEC treaty was from the very beginning an exercise in the creation of exceptions. For example, one early idea was that there are so-called 'natural monopolies' that should be exempted from competition, such as electricity and gas. Electricity and gas delivery require a physical connection between producer and consumer in the form of transmission or pipelines. If every producer offered its own lines, the costs for energy would explode, while producing energy without having the means to transport it and thereby sell it, holds only limited charm for investors. This is why energy utilities in almost all the member states were both producing and distributing electricity from their foundation. Since investment costs for the construction and maintenance of such grids are considerable, the utility companies were (and still are) reluctant to open their grids to alternative suppliers. There was a strong conviction, particularly in the 1950s, that if the objective was nationwide coverage, there simply was no alternative to vertically integrated utilities; and because those companies were mostly state-owned, it did not contribute to a market-driven approach.

1970–1986: Oil crises and Chernobyl

In January 1973, the United Kingdom, Ireland, and Denmark joined the ECSC, EEC, and Euratom. This was a strategically decisive step for energy supply security in the EU because of the 1960s discovery of huge oil and natural gas deposits in the North Sea. North Sea oil first reached the European market in 1975, reducing its dependence on increasingly unstable Arab suppliers, the degree of which was revealed in 1973/74 when the first oil crisis hit Europe. That crisis occurred in the wake of the October 1973 Egyptian and Syrian invasion of Israel, which Israel managed to repulse with the help of its allies, Europe and the United States.

As a reaction to Western help for Israel, the oil-producing Arab countries – organized through the Organization of Petroleum Exporting Countries (OPEC) – initiated an oil embargo on 4 November 1973. In practical terms, this meant that they cut the production of crude oil. As the EEC imported 95% of its oil at the

time and its demand could not change as rapidly, prices soared. A barrel of oil suddenly rose from three to five USD, or an increase of almost 70%. Over the course of 1974, the price rose to more than twelve USD (roughly equivalent to 56 USD in 2014 terms), even though the embargo for most EEC countries had already ended in November 1973 after the Organization of Arab Oil Petroleum Exporting Countries (OAPEC) lifted its embargo on most EEC countries following a joint European declaration on the situation in the Middle East (Statements of the Foreign Ministers and other documents. European Political Cooperation 1973). The sudden increase in cost and growing concerns over supply shortages caused countries such as Germany and Austria to introduce speed limits and car-free days; although the overall economic effect was, in fact, negligible. In the UK, labour disputes with coal miners and railroad workers exacerbated increases in oil prices, leading to a winter energy crisis that forced Prime Minister Ted Heath to ask his countrymen to heat only one room in their homes. The Arab oil suppliers directed their embargo mainly towards the Netherlands, which had allowed the US to use its territory to airlift military supplies to Israel, and provided the latter with oil during the war. European solidarity took a hard hit during the crisis. Despite the high hopes of solidarity raised by the 1968 'stockpiling directive' (Council of the European Communities 1968), the nine member states responded to the first oil crisis by seeking bilateral contracts with Arabian suppliers. Instead of unity, the new attitude was 'save yourself, if you can!'.

The one positive consequence of the oil crisis was the establishment of the International Energy Agency (IEA) in November 1974. The idea behind the IEA was not new. While still National Security Advisor to President Nixon, Henry Kissinger suggested founding an 'Energy NATO' within the institutional framework of the Organisation for Economic Coordination and Development (OECD). The resulting *Agreement on an International Energy Programme*, signed by 16 countries (all EEC member states with the exception of France) in 1974, foresaw an automatic international oil-sharing mechanism in cases of emergency. It then took until 1977 until the member states of the EEC agreed (Council of the European Communities 1977b) to allow the Commission to make suggestions for the Community-wide reduction of oil consumption in cases of emergency. In another missed opportunity, the decision's unclear wording and the lack of any automatic saving procedures very clearly

showed that the EEC member states preferred national programmes over European ones.

In September 1974, the EEC Council of Ministers approved a resolution concerning a 'new energy strategy' where they once again emphasized the necessity for a common energy policy and agreed that precise figures were necessary in order to achieve it. They would reach their goal through rational consumption, development of nuclear power, reliance on solid fuels, diversification of supply, technological development, and environmental protection. In mid-December of the same year, a resolution defined the objectives of the Community energy policy to be reached by 1985 (Council of the European Communities 1974). These included reducing Community dependence on imported energy to 50% (down from 63% in 1973), reducing the Community-wide growth rate in energy consumption to a level 15% below January 1973 estimates, and cutting overall petroleum imports from third-party countries to no more than 540 Mtoe (down from 640 Mtoe in 1973). In addition, nuclear power should account for 200 GW of installed capacity; hydro and geothermal electricity contributions should increase to 45 Mtoe. Finally, by 1985, the targets foresaw reducing the percentage of imported oil to 38% of total energy requirements (down from 61% in 1973).

In order to reach its ambitious targets, the Council envisaged voluntary cooperation from industry and the financial support of the member states. The Council passed a few accompanying legal instruments to help the process, including: a regulation concerning the communication on the state of the Community's energy supplies (Council of the European Communities 1976b), a directive regarding a Community procedure for information and consultation on the prices of crude oil and petroleum products in the Community (Council of the European Communities 1976a), and a decision regarding Community procedures for exporting oil and petroleum products between member states in the event of a supply crunch (Council of the European Communities 1977a).

Paradoxically, the oil shortage of the 1970s was offset by a vast surplus of coal. Part of that surplus could be used to implement another Council directive (Council of the European Communities 1975) that obliged member states to maintain a minimum stock of fossil fuels for use in their thermal power stations. Under such circumstances, the ECSC could no longer meet its objective to prevent national subsidies for coal mining. It was now clear that the

first oil crises shifted the overriding concerns from the combination of supply security and low prices to secure and sustainable supply.

A second drastic price hike occurred in 1979, triggered by the Iranian Revolution and exacerbated by the onset of the Iran–Iraq war in September 1980. Together, the two events took almost six million barrels of oil off the international market. Coupled with unilateral price hikes by Saudi Arabia and other OPEC nations, the price of crude skyrocketed to more than 35 USD a barrel by 1981 (or circa 112 USD in 2014 terms). By the beginning of 1981, imported oil (excluding freight) cost was 164% more than at the end of 1978, and within the EEC, oil payments rose 40% to 105 billion USD, or almost 4% of EEC GDP. Europe's reaction was limited to the adoption of a general strategy concerning the efficient use of energy and supply security. It comes as no surprise that the European Parliament claimed that it '[r]egrets the constant inability of the Council of Energy Ministers to implement European Council decisions on the common energy policy' (Council of the European Communities 1980: 41).

At the beginning of the 1980s, the Council requested that the Commission provide a progress report concerning the 1990 energy objectives with respect to energy strategy and solid fuels. Increased nuclear capacities and oil production in the North Sea had created a positive supply situation, which allowed the Commission to push for basic agreements in two key areas: energy prices (including taxes) and investments (see European Commission 1980a–d). Harmonizing price levels seemed important to achieve economic convergence across the EEC. Different national policies were leading to enormous price differences between member states, particularly in electricity – in some cases up to 40%. Investing in energy infrastructure seemed an appropriate means to reduce import dependency, so to pay for those investments, the Commission proposed a Community-wide tax on energy.

The 1980 Spring Council in Luxembourg produced precious little in terms of taking up the Commission's latest energy initiative. While it did call for structural changes in the overall use of coal and nuclear power, turning the matter over to the appropriate ministerial councils for further examination, it remained silent on the question of an energy tax (European Commission 1980e). Energy ministers were particularly reserved on the investment question and, thus, commissioned a study of the national energy programmes,

with the goal of determining whether such investments were even necessary. In October, the Economic and Financial Affairs Council put under consideration further Commission initiatives on restructuring Europe's energy industries (European Commission 1980f), but the ministers could agree only to postpone the debate over energy prices and investments to a later date. The energy ministers met again in November to clarify the Community's goals in the field of energy, and decided to put the notion of an energy tax squarely on the back-burner. Between 1981 and 1985 the Commission made several energy-related proposals (see e.g. European Commission 1981a–b, 1982, 1983), which the Council politely welcomed and subsequently ignored. Real progress was rare and difficult to identify.

Despite the efforts of the Commission to build an energy infrastructure fund through a community energy tax in the first half of the 1980s, the idea failed to resonate with the member states. Huge differences over state subsidies for coal thwarted any progress. The pattern of indecision was palpable. The European Council would formulate broad policy goals. Then the Commission would hammer out the details and make recommendations. Finally, the member states would fail to agree on any sort of concerted action. In 1983, the Commission issued a progress report in which it concluded that, despite many useful discussions, the Council failed to agree on any measures concerning the Community's energy strategy (European Commission 1983a).

On 26 April 1986 the Chernobyl nuclear reactor in the Soviet Socialist Republic of Ukraine experienced a meltdown and exploded, releasing a massive cloud of radiation that rapidly spread westwards into Europe. The Chernobyl disaster, as it became known, changed Europe's energy focus in the second half of the 1980s. The accident raised deep concerns about the use of nuclear power in general and shattered the popular optimism of the early 1970s that nuclear energy could solve many of Europe's energy problems.

While the political fallout of Chernobyl led to a decisive turn in public opinion about nuclear energy, the actual environmental and health consequences resulting from the radiological exposure were less clear. For example, Cardis et al. (2006) projected that by 2065, radiation exposure from Chernobyl will cause approximately 16,000 cases of thyroid cancer and 25,000 cases of other cancers.

Meanwhile, the UNSCEAR (2000) argued that observed increases in incidents of cancer in the affected areas were observed before the accident (UNSCEAR 2000) and, thus, not necessarily caused by the disaster. In order to 'scientifically clarify the radiological, environmental, and health consequences of the Chernobyl accident', the IAEA initiated the Chernobyl Forum in 2003, which brought together the IAEA with other United Nations Organizations, Belarus, Russia, and the Ukraine. In 2006, the Forum's Environmental Group issued a comprehensive report (IAEA 2006) recommending the continued monitoring of residents in the exposed areas and investigating the long-term effects of radiation on the genetic structure of plants and animals.

The disaster also delivered the uncomfortable reminder that Europe lacked vital early warning mechanisms and public safety measures. Even with a solid treaty base (Art. 51 Euratom), a proper information system and action plan in the case of nuclear disasters was lacking. Thus, the Council passed a Decision on the 'early exchange of information in the event of a radiological emergency' (Council of the European Communities 1987) and the EEC acceded to the IAEA Treaty on information exchange in emergencies. This led to the establishment of an early warning system called the European Community Urgent Radiological Information Exchange (EUCURIE), tasked with constantly monitoring radioactive levels. To address public safety concerns, the Community passed a number of measures. With respect to food contamination, for example, the Council passed a regulation establishing maximum permitted levels of radioactive contamination of feedstock and foodstuffs following a nuclear accident or radiological emergency (Council of the European Communities 1987a). In 1989, it passed a directive on providing public information about health protection measures and steps to take in the event of a radiological emergency (Council of the European Communities 1989).

Almost two months prior to the Chernobyl disaster (17 February 1986), the member states adopted the Single European Act (SEA; 1987), the first major treaty reform since the founding treaties. Best described by the buzzwords deregulation and liberalization, the treaty represented a giant leap towards the completion of the internal market, which the member states agreed to establish by 31 December 1992 and defined it as an 'area without internal frontiers in which the free movement of goods, persons, services

and capital is ensured in accordance with the provisions of this Treaty' (Art. 14 SEA). Much of its content was based on a 1985 Commission White Paper entitled *Completing the Internal Market*, which explicitly described 279 separate legislative measures necessary to complete an internal market (European Commission 1985).

In a major reform aimed at facilitating the decision-making process and avoiding delays, the treaty defined an extended number of cases in which Council decisions would require qualified majority voting instead of unanimity, and applied the former to all measures related to the realization of the single market. The treaty also significantly enhanced the role of the European Parliament by introducing the cooperation procedure (Art. 252 SEA) and expanded the EEC's competences in other key policy areas such as research and development, technology, and social policy. Yet the SEA's most important change for the energy sector was the inclusion of environmental law into primary law, which allowed the Community to pass relevant energy laws by relying on environmental law.

Even before the SEA entered into force (September 1986), the member states passed a resolution concerning new Community energy policy objectives for 1995, in which they foresaw the convergence of member-states' policies (Council of the European Communities 1986) and explicitly identified competition as an important mechanism to secure the Community's energy supply, a move which came on the heels of a 1985 Commission White Paper that identified competition as an important mechanism for achieving the internal market (European Commission 1985). This change was an unmistakable shift in favour of a market-oriented approach, and one that stood in marked contrast to the national energy champions that dominated the market at the time. There were several important reasons behind this new approach including the decline of international oil prices, the restructuring of the energy sector that grew out of a general global trend towards deregulation, and the adoption of the Single European Act, which placed the objective of a common energy market squarely in the focus of the EEC's plans to realize its internal market. In keeping with past practice, however, the Council made it clear that it was up to the member states to implement the changes and to secure market principles within their respective economies; supranational guidelines were to serve only as a framework.

A convoluted path from Maastricht to Amsterdam

In September 1986, the Council noted that 'adequate and secure availability of energy' delivered on a 'satisfactory economic basis remains a prerequisite for the pursuit of the economic and social objectives' (Council of the European Communities 1986: 1). In short, cheap and reliable energy is necessary for a strong economy and social welfare. With that principle in mind, the Commission would arduously use the next decade and a half to advance a community-wide energy policy.

During the late 1980s, the Commission exploited the competing interests of the member states in order to foster the building of a common energy market in gas and electricity. In 1988, the Commission published the influential working paper *The Internal Market for Energy* (European Commission 1988), in which it emphasized the connection between supply safety and the internal market. It recommended the strict application of single-market principles to the energy sector. Goods should move freely, monopolies and state subsidies should be banned, and environmental and safety standards should be harmonized. Such a common market for energy was attractive in the eyes of the Commission because most member states were energy importers and their consumers demanded low energy prices. As a first step, therefore, the Commission envisaged a legislative package dealing with areas in which it identified an urgent need for liberalization: gas and electricity transit, price transparency, and investment projects.

Most member-state governments were initially sceptical. Germany and the Netherlands demanded a broader European approach. Denmark was strictly against the introduction of market principles due to its opposition to nuclear energy, and a free market would make it next to impossible to control the sources of electricity production. Spain was afraid to lose profitable income earned from transit charges levied on electricity transfers between France and Portugal. Greece worried about domestic coal production and its chances to survive in a free market. Furthermore, the energy industry voiced strong opposition to the gas transit proposals. The two big exceptions were France and the UK. The former wanted to export its substantially overproduced nuclear-generated electricity, and the latter had already finished liberalizing its national energy market in the preceding years.

The so-called common carrier principle, where owners would be required to open existing gas and electricity grids to alternative suppliers in exchange for a fee, and consumers were given the freedom to choose between energy suppliers, proved to be the most contentious points. Therefore, in September 1989, the Commission installed two committees to discuss those questions. The Professional Consultative Committee on Electricity (PCCE) brought together representatives of the electricity-generating companies, and the Comité Consultatif Etats Membres Electricité (CCME) brought together the twelve member states. It took four and a half years of protracted discussion before a common directive (EP/Council 1996) was passed in which the member states agreed *inter alia* to vertical unbundling and increased competition including a phased opening of supply competition, but it failed to provide for effective regulation and avoided the issue of granting monopoly rights. In essence, it was a first step, a pragmatic exercise in balancing collective interests.

Both internal and external reasons explain the lengthy negotiations, and the less than optimal outcome. Internally, the member states needed to overcome a fundamental contradiction present in their energy markets. Europe's energy-intensive industrial sectors wanted access to France's nuclear-generated electricity because it was much cheaper than German electricity, which was being produced by coal-fired power plants. However, allowing this would reveal the enormous subsidies that both states were pouring into their national champions. Meanwhile, rising dependence on foreign electricity raised concerns by these same national champions about their legal and political responsibility to provide a constant and stable supply of energy, not just for big industry but also for the public at large.

Once again playing the role as agenda-setter, the Commission tried to overcome the respective national opposition by formulating a variety of legislative proposals with enough integrated leeway to account for the competing interests of the member states. It was a strategy that achieved limited success, both in terms of legislative passage and its publicly declared internal market goals. For example, while a draft directive concerning the mutual notification on investments in the oil, gas, and electricity sector was rejected by the member states because they deemed it to be too bureaucratic, the Council approved, by qualified majority, a directive on the transit of natural gas through grids (Council of the European Communities 1991) that intended to break up the distribution monopoly of the large utility

companies. This came on the heels of another, at least partial, legislative success, namely a draft directive to improve the transparency of gas and electricity prices charged to industrial end users (Council of the European Communities 1990a). The latter deliberately omitted discussion of prices in order to allow for easy adoption. The Commission also tried to put pressure on the member states to finally abolish state subsidies, criticizing subsidies for coal mining in Spain and Germany as well as in the petroleum sector in Spain, Portugal, and Greece. Alas, such massive structural changes in the subsidy regime proved to be too much, too fast for the member states.

Externally, a series of events occurring over the course of the negotiations substantially changed the political and energy landscape. Among these were the fall of the Berlin Wall (November 1989) and the subsequent German reunification (October 1990), the Iraqi invasion of Kuwait (August 1990) and the subsequent Gulf War (February 1991), and the tumultuous dissolution of the Soviet Union (December 1991). For some Western European leaders, the fall of the Iron Curtain evoked a long-held dream to unify the continent under the auspices of the European Community. The necessary preparations for taking in new members from the East were reflected in the Treaty on the European Union (TEU) signed on 7 February 1992 in Maastricht in the Netherlands. When the TEU ('Maastricht Treaty') entered into force on 1 November 1993, it was the first to explicitly mention energy in primary law, albeit not in the form of an energy chapter as sought by the Commission. The member states could only agree at that time to include energy in the list of activities and objectives (Art. 3 TEC). Contrary to other policy fields (e.g. Common Agricultural Policy), in which specific and concrete instruments for the achievement of an objective were included, no measures were taken for energy policy. Following the same pattern, the Treaty of Amsterdam did not touch on energy policy at all. It was only in the Constitutional Treaty, which failed ratification in 2005, that a coherent energy article (Art. III-256) appeared for the first time.

Only three provisions of the TEC mentioned the term 'energy'; and they did so in either general terms or broad goals. According to Article 3(1) TEC, the activities of the Community should include 'measures in the spheres of energy'. Similarly, according to article 154 TEC, 'the Community shall contribute to the establishment and development of trans-European networks in the areas of transport, telecommunications and energy infrastructures'. With regard to

environmental policy, Article 175(2) TEC stated 'the Council [...] shall adopt [...] measures significantly affecting a member state's choice between different energy sources and the general structure of its energy supply'. For most of its existence, therefore, European energy policy relied on a mixture of general internal market rules (Art. 114 TFEU, ex Art. 95 TEC), the application of the flexibility clause (Art. 352 TFEU, ex Art. 308 TEC), and environmental and competition law (Art. 101–106 TFEU, ex Art. 81–86 TEC). Competition law was particularly important in the pre-Nice Treaty years, because it dealt with mergers and acquisitions, antitrust laws, and state aid provisions, areas that strongly relate to the energy sector.

Increasing political instability in Russia raised serious concerns about the security of Europe's gas supplies, prompting Dutch Prime Minister Ruud Lubbers to suggest establishing a European Energy Charter during the June 1990 European Council meeting in Dublin. The Council responded by asking the Commission to draw up a charter particularly concerning the production and transport of gas and to present it at a special energy conference in the fall of 1991. An attempted coup in Moscow (August 1991) accelerated the process. In December 1991, the member states, meeting in The Hague together with representatives of the European Free Trade Association, the Central and Eastern European accession states, Japan, and the US, signed the European Energy Charter. The Charter itself, formally known as *Concluding Document of The Hague Conference on the European Energy Charter*, was a 'concise expression of the principles that should underpin international energy cooperation' mainly as it related to securing energy supplies (see Chapter 7).

Promoting international norms in the energy sector was one of the first attempts by the European Community to employ a strategy of rule export in order to secure its interests abroad. For this reason, among others, the 1991 agreement was deliberately non-binding, with the explicit understanding that the signatories would work towards a binding multilateral agreement (Energy Charter Secretariat 2004). Negotiations began promptly and the Energy Charter Treaty was signed in Lisbon in December 1994. Once in force (1998), energy was to be traded according to GATT/WTO rules. Foreign investments were to be protected. Exploration, production, and transport were to be non-discriminatory, and energy transit was to be guaranteed even in times of conflict. Russia signed the treaty, but never ratified it, and in 2009 officially announced that it will not become a contracting partner (although it remained a

member of the Energy Charter Conference); the practical effect being that foreign direct investment in Russia's energy was no longer protected under Charter rules. The US limited its membership to observer status, as did Canada; and Norway had yet to ratify its membership in late 2014. Nevertheless, by January 2014, 52 states had signed or ratified the treaty, most of which were located in Europe or Eurasia. Thus, although the strategy of rule export in order to increase supply safety failed to sway its biggest external energy supplier, Russia, the European Community did succeed in setting the agenda and the rules for much of the former Soviet Union, and, in that important sense, was quite successful.

The late 1980s and early 1990s witnessed fundamental changes in Europe's political and energy landscape. It had taken important steps towards an internal energy market, capitalized on external circumstances to enhance its treaties, and begun the process of establishing advantageous norms in the international energy market. Concurrent with these developments was a growing awareness of environmental matters.

Environment seizes the day

In June 1988, over 300 scientists and world leaders met in Toronto for the first World Climate Conference. Known officially as Conference on the Changing Atmosphere, they established a clear link between energy consumption and climate change, focusing international attention on the issue. A year later, the participants of the 14th World Energy Conference in Montreal concluded that while rising global energy needs could be satisfied technologically, the resulting environmental damage would constitute a serious problem. The conference was organised by the World Energy Council (WEC), an institution formed in 1923 establishing a network of leaders and practitioners to exchange ideas and concepts on how to create a sustainable energy system, and which, by 2014, had united over 3,000 member organizations from a variety of fields. Despite the dire warnings and growing body of evidence, however, the wealthy industrialized countries were unable to reach a consensus on how and to what extent greenhouse gas (GHG) emissions had to be reduced in order to avoid the worst-case scenarios.

Out of this hotly debated international topic, the European Commission emerged as a driving force. In February 1990, the Commission published guidelines for an environment-friendly

energy policy and asked the member states to take measures to reduce industrial emissions (European Commission 1990). Two months later, the Council and Parliament passed a regulation establishing the European Environment Agency (EEA), which only began operating in 1994, and the European Environment Information and Observation Network (Council of the European Communities 1990b) to support the Community and member states on environmental issues and improve cooperation between them. At the second World Climate Conference in Geneva in 1990, the Community advocated adopting measures against climate change, perhaps as a response to the dramatic environmental damage found in some areas of the former Eastern bloc countries following the fall of the Iron Curtain. China, Japan, the Soviet Union, and the United States did not agree. In fact, the parties could only agree on the future coordination of activities and the intention to develop a convention on climate change. The World Meteorological Organization (WMO) provides a summary overview of the World Climate Conferences on its website (wmo.int).

In response to these developments, Europe's environmental and energy affairs ministers held a joint Council meeting in October 1990, the first of its kind, where they agreed to stabilize CO_2 emissions at 1990 levels by 2000. Against this backdrop, the Commission proposed an ambitious directive in June 1992 aiming to reduce CO_2 emissions by once again reviving the unpopular notion of an energy tax, specifically one that targeted petroleum fuels and electricity (European Commission 1992). Anticipating resistance, the Commission formulated the draft cautiously, proposing special conditions for energy-intensive industries and encouraging their compliance through tax rebates on investments in energy-saving technology. In order to reduce possible competitive disadvantages, it also proposed making the introduction of such a tax dependent upon other OECD members introducing similar measures. The latter was a deal killer. Besides the obvious problem that the member states would never agree to it, it was clear that the other OECD countries were not even considering introducing such a tax. The proposal can be seen, therefore, as the Commission's testing of the political waters. Another interpretation, however, is that the Commission was attempting to establish a progressive position in light of the 1992 UN Conference on Environment and Development (UNCED) held in June in Rio de Janeiro, and one that fit nicely into its publicly crafted image of environmental advocate.

Two and a half years later (December 1994), a revised proposal was also shot down at the Essen Council meeting, but not because of a principle objection to energy taxes as such. Ultimately, competing interests between member states killed the bill. Coal-consuming countries wanted the tax applied to all energy sources, while nuclear and natural gas consumers were only prepared to accept a tax on CO_2 emissions. The gap was too large to bridge. Even a compromise would have been untenable, because the member states were openly reluctant to grant the newly formed European Union any taxation authority or competence.

Despite the failed attempts to establish a Community-wide energy tax and pass overly ambitious environmental legislation, environmental and energy policy became permanently linked by the time the European Union came into force. Since then, the reduction of CO_2 emissions, investments in renewable energy production, and increased energy efficiency, etc. have become the corollary – and sometimes even the source – of EU energy politics. Indeed, environment has seized the day.

When in 1991 the European Parliament symbolically declared 1994 to be the year of energy (European Parliament 1994), the Commission welcomed the initiative. It saw the EP as a partner to further its own energy policies and seized the opportunity. In February 1995, just a month prior to the first UN World Climate Conference in Berlin, the Commission published a Green Paper entitled *For a European Union Energy Policy* (European Commission 1995). This was followed by a White Paper in December 1995 entitled *An Energy Policy for the European Union* (European Commission 1995a) that emphasized the complete integration of energy policy into the general economic policy, which included market integration, deregulation, limits on public intervention, sustainable development, consumer protection, and economic and social cohesion. According to the Commission, the goal of the European energy policy was to achieve competitiveness, supply security, and environmental protection, something that it would later call comprehensive energy security (see Chapter 1). To emphasize these goals, it established the Energy Consultative Committee in 1996 and gave it a five-year mandate. The Commission subsequently announced its intention to increase the market share of renewables up to 12% by 2010 (European Commission 1996, 1997) and later transformed the Energy Consultative Committee into the European Energy and Transport Forum, comprising 34

Commission-selected members from diverse sectors involved in energy and transport policy. It also limited its mandate to renewable two-year terms (European Commission 2001c).

Meanwhile, further incentive for action came from the growing international momentum to curb global warming. In December 1997, the United Nations Framework Convention on Climate Change (UNFCCC) held a climate change conference in Kyoto, Japan, resulting in an international treaty that aimed to reduce growth in greenhouse gas emissions. The resulting and legally binding Kyoto Protocol, which the European Union signed in April 1998, contained specific emissions targets for the so-called Annex I countries. Countries with commitments under the Kyoto Protocol were expected to meet their obligations to reduce greenhouse gas emissions primarily through national measures. Accordingly, the EU agreed to reduce its CO_2 emissions by 8% by 2012, compared to 1990. In order to achieve this ambitious goal, the Commission proposed to double the share of renewable energy (from 6% to 12%) in total energy consumption by 2010. In short, they could now pursue the recommendations made in the 1997 White Paper (European Commission 1997). The Commission further proposed increasing the share of biofuels to 5.75% and increasing energy efficiency annually by 1% by 2010. However, implementation was never very likely because it lacked appropriate sanction mechanisms. Nevertheless, the Commission continued to stay on message in the years that followed. For example, in October 1998 it published *Strengthening Environmental Integration within Community Energy Policy* (European Commission 1998) where it pushed its view that environmental protection and an efficient energy policy were compatible notions, following up in April 2000 with an action plan to reduce energy consumption through improved energy efficiency (European Commission 2000a).

The coming into force of the Maastricht Treaty provided the necessary boost for the Commission's liberalization efforts aimed at increasing competition, keeping energy prices low, and securing existing and future energy supplies. Several important legislative acts issued in the early 1990s paved the way for those efforts (see also Chapter 5, Section 'The creation of the internal energy market'). For example, the Council issued three directives by late 1991 that improved the transparency of gas and electricity prices for industrial users (Council of the European Communities 1990a), facilitated the transit of electricity between the high-voltage grids

(Council of the European Communities 1990c), as well as the transit of natural gas between high-pressure transmission grids (Council of the European Communities 1991). Focus on the electricity and gas markets continued into the second half of the 1990s when the European Parliament and the Council issued two more directives for electricity and gas (EP/Council 1996, 1998) establishing common rules for their respective internal markets, with a special focus on simultaneously increasing efficiency in production, transmission, and distribution, and 'reinforcing security of supply and the competitiveness of the European economy [while] respecting environmental protection' (EP/Council 1996). In an illustration of how much the European Union had grown since the mid-80s, both documents stipulated concrete goals to be achieved in the immediate future, while at the same time guaranteeing that member states retained enough room for manoeuvre.

One can observe that the liberalization efforts of the 1990s delivered mixed results. There was progress in the natural gas sector, but it was slow and protracted. Transparency and cooperation, and the beginnings of renewable targets, in the electricity sector laid the foundation for achieving the European Council's goals to establish trans-European gas and electricity networks. However, the opening of national electricity markets suffered under the tension between competition and comprehensive provisioning; and the development of trans-European gas and electricity networks stagnated due to insufficient funding. Nevertheless, the decade brought agreements such as Directive 96/92/EC that required the member states to open their national electricity markets to foreign competition; and once it entered into force in 1999, there was no going back. The most remarkable development, though, concerns the position environmental affairs took in the realm of energy politics. It became the guiding tool for Europe's energy policy – if not always in fact, then certainly in rhetoric.

Supply security and climate change in an integrated market: From Nice to Lisbon

In response to the sharp rise in the price of oil in September 2000, the Commission issued the Green Paper *Towards a European Strategy for the Security of Energy Supply* (European Commission 2000), which called for an integrated approach to promote energy self-sufficiency, environmental protection, and market integration.

The Commission described the EU's energy situation in the bleakest of terms, identifying its expanding external dependence as creating 'economic, social, ecological and physical risks', and noted that the EU lacked the 'necessary means to change the international market', a weakness laid bare by the spike in oil prices. According to the Commission's online summary statement, 'The European Union's (EU) external energy dependence is constantly increasing. The EU meets 50% of its energy needs through imports and, if no action is taken, this will increase to 70% by 2020 or 2030.' Those energy imports, it adds, 'account for 6% of total imports and, in geopolitical terms, 45% of oil imports come from the Middle East and 40% of natural gas imports come from Russia' (European Commission 2014m).

The Green Paper called for a broad public discussion to be completed by November 2001. Among the issues to be discussed were ways to reduce energy import dependency, the role of taxation and public subsidies in the energy sector, funding strategies for renewables, supply grid optimization, the future role of nuclear power, measures to fight climate change, and ways to save energy. Most of the member states and NGOs that commented upon the Green Paper welcomed the Commission's proposal to control energy demand by promoting energy efficiency. Since renewables could be produced at home, their increased use should reduce import dependency and their higher cost could be offset with savings through energy efficiency. The intensive discussions incited by the Green Paper were summarized later in a Communication from the Commission to the EP and the Council (European Commission 2002a). In February 2002, the Commission formulated the Communication *Towards a Global Partnership for Sustainable Development* (European Commission 2002b), in which it explained how the Union could contribute to sustainable global development and identified key components that it recommended to be incorporated into an international agreement, a suggestion taken up by the 2002 Barcelona European Council. In addition to a White Paper on transport policy (European Commission 2001), a tremendously important sector that is responsible for 32% of the EU's energy consumption and 28% of all its CO_2 emissions, two important pieces of legislation followed: a directive on electricity generation from renewable energy sources (EP/Council 2001) and one on the promotion of biofuels for transport (EP/Council 2003a).

Despite the tendency towards a stronger focus on renewable energy sources, the Treaty of Nice, which entered into force in February 2003, brought about no discernable progress in the energy sector. Once again, the member states were simply unable to reach a consensus concerning a common energy policy. That was reserved for the Convention on the Future of Europe where a select group of representatives of national heads of state, parliaments, the EP, and the Commission, under the leadership of Giscard d'Estaing, were tasked with coming up with proposals to reform the EU's political system. The Convention met between 28 February 2002 and 13 June 2003. Once it began, however, it became clear that the body would not limit itself to the mere drawing up of proposals. Rather, it aimed to draft a European Constitution. The resulting *Draft Treaty Establishing a Constitution for Europe* (European Convention 2003) contained a major breakthrough for EU energy policy. It proposed shared competence in the field of energy (Part I, Title III, Article 13, Paragraph 2) and explicitly included a new section on energy (Art. III-157). It also set well-known goals, including establishing a functioning common energy market, achieving energy supply security and increased energy efficiency, as well as increasing the use of, and developing new, renewable energy sources. The delegates planned to substantiate those goals with laws or framework legislation after consulting with the Committee of the Regions and the European Economic and Social Committee. In order to reduce expected resistance, the section emphasized state autonomy in terms of their energy mix, writing '[s]uch laws or framework laws shall not affect a Member State's choice between different energy sources and the general structure of its energy supply' (European Convention 2003: 57).

The draft constitution had to overcome two major hurdles. First, it required ratification by an intergovernmental conference, which is the only institution that is authorized to change primary law according to the Treaties (Art. 48 TEU), and ratification by the member states in accordance with their national laws. Ultimately, the intergovernmental conference signed the Constitutional Treaty in October 2004, although not without at least one failed attempt under the Italian presidency of the Council in December 2003. Intriguingly, the energy article survived the debate unscathed (Art. III-256 TCE). The second hurdle, however, proved to be much more difficult. In a May 2005 referendum, a majority of French voters rejected the constitution. The same happened in the Netherlands in June. As a consequence, when the European Council met later that month, they decided to launch a 'period of reflection' on the future of Europe (European Council 2005). The constitution for Europe was dead in the water.

It took until June 2007, when another intergovernmental conference was convened, to develop a 'Reform Treaty' in order to revise the existing EU treaties. The heads of states and governments signed the *Treaty Amending the Treaty on European Union and the Treaty Establishing the European Community* in Lisbon (Treaty of Lisbon or Lisbon Treaty) on 13 December 2007. The energy section from the Draft Constitutional Treaty was largely copied into the new Lisbon Treaty, with one major exception – Poland insisted on a solidarity clause with respect to energy (Art. 194 Para. 1 TFEU). Among the objectives were the usual suspects, but the article contained a new objective concerning the promotion of the interconnection of energy networks. This additional objective was important because sufficient transmission capacity between member states is a prerequisite for a functioning internal energy market. Such networks would greatly reduce the almost total external energy dependence of some Eastern member states on Russian gas. Another decisive treaty element concerned the application of the ordinary legislative procedure (previously known as the co-decision procedure) to the field of energy. The ordinary legislative procedure replaced the co-decision procedure when the Lisbon Treaty came into force (Article 294 TFEU), providing the European Parliament with equal weight as the Council on a wide range of areas, including energy. Thus, although member states continue to retain full authority over their respective energy mixes, the Lisbon Treaty marked a substantial leap forward for an integrated European energy policy.

Article 194 TFEU formulates the following energy policy goals:

- to ensure the functioning of the energy market;
- to guarantee energy supply security in the EU;
- to promote energy efficiency, energy savings, and the development of renewable energy sources;
- and to promote the interconnection of energy networks.

These goals are to be realized 'in the context of the establishment and functioning of the internal market [...] with regard for the need to preserve and improve the environment [...] in a spirit of solidarity between Member States' (Art. 194 TFEU). The measures

taken to meet these goals are adopted in accordance with the so-called 'ordinary legislative procedure', meaning that the majority of representatives in both the Council and in the EP must support the measure. Nevertheless, if a decision has an impact on a member states' energy mix and its supply security, the Council still has to decide unanimously. This would be the case, for example, if the Commission initiated a EU-wide withdrawal from nuclear energy. Unanimity is also required if a proposal primarily touches existing tax legislation, in which case the EP only possesses the right to be heard.

Listing the different objectives of the EU's energy policy in Article 194 TFEU does not mean that those objectives are equally important, or that they can be achieved concurrently. In fact, much tension exists between those objectives, as do the conflicting goals of member states. For example, every member state is granted the right to determine the 'the general structure of its energy supply' (Art. 194(2) TFEU). However, this may conflict with the EU's target to establish a functioning internal energy market and promote the interconnection of energy networks as laid down in Article 194(1) TFEU. Similarly, a member state's right to determine 'its choice between different energy sources' (Art. 194(2) TFEU) – the specific energy mix – may well offset the EU's climate change and energy efficiency targets. Thus, despite Lisbon's significant upgrade in the legal basis and processes to meet its energy goals, the law remains vague on precisely which mechanisms can be applied to ensure solidarity between the member states in the event of an energy crisis or supply disruption.

Independent of the changes in primary law, the Commission furthered its goal to establish a common energy market in the first few years of the twenty-first century. In June 2003, the Council and EP adopted directives to establish common rules for the internal market in electricity (EP/Council 2003b) and to open national gas markets (EP/Council 2003c). The main purposes of these directives were to unbundle transmission and distribution system operators and their accounts, and open access for third parties to transmission and distribution systems. Additional steps were taken to enhance 'conditions for access to the network for cross-border exchanges in electricity' (EP/Council 2003). As the Community's competition rules prohibited discrimination, the member states were requested to ensure that third parties could access transmission and distribution systems based on tariffs universally applied to

all eligible customers. The Council, the EP, and the Commission then took a number of additional steps to maintain progress and enhance harmonization. For example, independent national regulatory authorities, each of which varied in its responsibilities, still oversaw national market conditions and practices. Thus, the Commission established the European Regulatory Group for Electricity and Gas (European Commission 2003) to advise it and national regulators. In the environmental field, the European Parliament and Council passed Directive 2003/87/EC establishing a trading scheme for a greenhouse gas emission allowance, which came into force on 1 January 2005 (EP/Council 2003d; European Parliament and Council of the European Union 2009c).

In January 2007, the Commission published two important Communications with very different and yet complementary messages. In its *Sustainable Power Generation from Fossil Fuels: Aiming for Near-Zero Emissions from Coal after 2020* (European Commission 2007l), it acknowledged the importance of fossil fuels. In its *Renewable Energy Road Map*, it set out a long-term vision for renewable energy sources in the EU and proposed to 'establish a mandatory (legally binding) target of 20% for renewable energy's share of energy consumption in the EU by 2020' (European Commission 2007m). The reasons behind this highly ambitious goal were the events of winter 2004/05, which drastically revealed Europe's vulnerability in the energy sector.

A series of energy supply crises between 2006 and 2009 once again reminded Europe of its unfavourable predicament vis-à-vis external suppliers. When Russia suspended all gas supplies passing through Ukrainian territory on 1 January 2006, there was a sudden and sharp drop in gas pressure along the Austrian, Italian, Polish, and German gas lines. The crisis occurred as a result of a dispute over prices and debt. While Gazprom demanded that Ukraine pay a market rather than preferential price for its natural gas, Ukraine demanded higher gas transit fees. Almost 80% of the gas Russia exported at the time to the West transited Ukraine. Consequently, a number of European countries experienced sharp drops in their supply.

The EU reacted by passing a directive concerning 'measures to safeguard security of electricity supply and infrastructure investment' (EP/Council 2005), with the objective to reach supply security via a competitive single EU electricity market and joint investments in infrastructure. Shortly after the crisis abated, Poland openly proposed establishing a European Energy Security Treaty (Council 2006a), a sort of 'Energy NATO' alliance with far-reaching

goals beyond what Kissinger had envisaged in 1975 (Scharples 2012). While the proposal failed to take hold in 2006, it is notable that some progress on establishing an Energy Union came under a 2015 Polish presidency of the European Council. Nevertheless, the quarrelling between Russia and Ukraine repeated itself in the winter of 2007/08, and again in 2008/09, when Transneft, another Russian state-controlled business responsible for its national oil pipelines, decided to close the Druzhba (Friendship) pipeline, which back then, delivered 20% of German oil imports. It took three days of intensive negotiations to reopen the pipeline. The disputes between Russia and Ukraine reached a crescendo in 2014 when Russia seized the Crimea in the wake of a pro-European revolution, which itself followed the sudden about-face by Kiev in the negotiations over a European association agreement. This set off a violent uprising by pro-Russian separatists in eastern Ukraine, which put Brussels and Moscow on a collision course that resulted in a major deterioration of EU–Russian relations and the suspension of the South Stream pipeline project. At the time of writing (May 2015), the conflict remained unresolved.

For Europe, the Russian–Ukrainian crises of 2006 to 2009, and especially the events of 2014, left a sour taste, not only because it showed the extent of its dependence on Russia but also because it revealed another vulnerability in its dependence on neighbouring transit countries, and exposed a number of fundamental weaknesses in Europe's energy situation. It was well known that Europe was far too dependent on foreign gas supplies, but Europe's inability to move surplus gas and oil supplies to its newer member states in need, particularly in the 2005 and 2008/09 cases, underscored the problems of not having a fully integrated internal gas market. Russia, which was equally vexed because it relies heavily on receipts from its deliveries to Europe, ramped up its efforts to find ways to supply Europe by bypassing Ukraine altogether. The latest crisis came at an opportune time for Moscow. Russia had already proposed to build a pipeline to bypass Ukraine altogether in 2001, by moving offshore directly from Vyborg (Russia) to Greifswald (Germany), and had been conducting feasibility studies and securing the requisite permissions ever since. The result was the construction of the Nord Stream pipeline consisting of two parallel lines, the first of which became operational in November 2011 and the second in August 2012. Europe thus came out of these crises no less dependent on Russian oil and gas.

In March 2007, the Commission, seeking to stimulate debate, launched another Green Paper concerning market-based instruments for environment and related energy policies, and once again included the notion of an energy tax (European Commission 2007c). Later that month, the Council adopted an Energy Action Plan, which included, among other things, a reduction of European emissions by 20% compared with 1990 levels (European Commission 2007). Similar targets were also included in the *20-20 by 2020* strategy the Commission presented in 2008. The easy to remember slogan implied two important goals: first, that the EU has to reduce greenhouse gas emissions by at least 20% and, second, that the member states have to increase the share of renewable energy to 20% of total energy consumption by 2020 (European Commission 2008a).

Then in 2009, the Commission published a progress evaluation of the so-called second legislative package on energy (the first consisting respectively of the 1996 electricity and 1998 gas directives). It concluded that even four years after the deadline (1 July 2004), implementation of the second electricity and gas directives was still incomplete (European Commission 2009a). The Commission complained about the member states' compliance record, already noting in 2007 that 'the objectives of market opening have not yet been achieved. Despite the liberalisation of the internal energy market, barriers to free competition remain' (European Commission 2006a). The European Regulators' Group for Electricity and Gas (ERGEG), which was responsible for monitoring the progress of the member states, reported that some were still far from full compliance with the directives (European Commission 2009a). Further shortcomings existed in numerous areas. For example, gas and electricity wholesale and retail markets were still highly concentrated. Gas and electricity prices varied substantially between member states. Unbundling measures were not sufficiently implemented. Information on consumers' rights and choices was lacking. Worst of all, the EU was still inadequately prepared to react to a potential gas supply crisis (European Commission 2009a).

The Commission initiated a third legislative package based on these insights, which, proposed in 2007, entered into force in September 2009. As in previous years, two directives intended to remove the remaining barriers were simultaneously adopted for the gas and electricity markets (EP/Council 2009a, b). The member states were given 18 months (until March 2011) to implement

them. This new package aimed at increasing access by third parties, transferring competences to the Agency for the Cooperation of Energy Regulators (ACER; founded in 2010 – an institution that was expected to assist the national regulatory authorities and eventually coordinate the work between them), and breaking the market stranglehold held by vertically integrated companies. The latter point was prioritized because the strong and intransigent position held by vertically integrated energy companies continued to pose a major challenge to the liberalization of the member states' gas and electricity markets. Therefore, while former directives regarded merely the legal unbundling of generation and transmission as sufficient, the 2009 legislative package (the so-called third legislative package) added the feature of separating companies' generation and sale operations from their transmission networks, known as ownership unbundling. This piece of legislation was designed to further liberalize the internal energy market. However, it brought about external repercussions for EU relations with Russia, because it excluded the possibility of state-owned companies, such as Gazprom, to move gas into Europe and concurrently own the transmission and sale of gas. This problem ultimately played a part in debunking Russian support for the South Stream pipeline project and heightening tensions between Moscow and Brussels.

The EU was no less active on the regional and global levels throughout the early years of the twenty-first century, as it actively pursued a strategy to build deeper cooperation with a wide range of countries, notwithstanding its dispute with Russia over the fate of Ukraine and the Crimea. For example, it commenced the EU–Russia energy dialogue in 2000, initiated a new Mediterranean aid program for the years up to 2013 that aimed to integrate the European and Maghrebi gas markets, and extended the EU energy acquis to the Balkans through the Energy Community of South East Europe (ECSEE). It also incorporated Azerbaijan into its Neighbourhood Policy to capitalize on the country's important energy resources, an arrangement that paid off in December 2013 when a European consortium of companies signed a deal to develop the massive Shah Deniz 2 gas field just as Ukraine, under pressure from Moscow, withdrew from negotiations to upgrade cooperation with the EU.

Similarly, the EU increased its focus on regional partnerships, including Africa (the Africa–EU Energy Alliance) and in the Black Sea region. The Baku initiative, for example, brings the Commission together with Caspian Littoral states and their neighbours in order to enhance cooperation in energy and transport; and since the 2007 launching of the Black Sea Synergy, the Commission has been working diligently to integrate the Black Sea region into the European energy market. All of these initiatives play to Europe's strengths by aiming at the export of European market principles and regulations (and 'good governance'), which happens to be widely perceived as the EU's most potent negotiating tool in international energy negotiations. However, they can also be seen as accompanying measures to a more proactive energy foreign policy. As the High Representative for the Common Foreign and Security Policy, Javier Solana, said in 2006, Market liberalisation 'is only part of the answer' (Solana 2006: 2).

By 2010, the European Union undoubtedly was one of the world's leading bodies on matters of energy and the environment, much of which was due to decades of tireless efforts by the Commission to promote the needs and benefits of a Community-wide, and now Union-wide, sustainable energy policy. Therefore, when negotiations at the 2009 Copenhagen Summit failed to materialize any binding outcomes, the member states decided to push forward with their own solution. In March 2011, the European Commissioner for Climate Action, Connie Hedegaard, introduced *A Roadmap for Moving to a Competitive Low Carbon Economy in 2050* (the so-called Low Carbon Roadmap) that examined cost-effective ways of reducing greenhouse gas by 80–95% by 2050, compared to 1990 (European Commission 2011a).

Nine months later, responding to a request from the Extraordinary European Council of 4 February 2011, the Commission adopted the Communication *Energy Roadmap 2050* that provided the basis for developing Europe's next long-term energy policy framework, together with stakeholders throughout the energy sector (European Commission 2011b). As expected, the roadmap identified the three familiar goals of comprehensive energy security (decarbonisation, supply security, and competitiveness). However, it went further, explicitly claiming that a secure, competitive, and decarbonised energy system could be possible by 2050 as long as certain conditions were met. Those conditions include fully implementing the EU's 2020 strategy, massively increasing energy efficiency and the share of renewables, increased and sustained public and private investments in research and development, and more coordination in international energy relations. In short, the

roadmap provided a shopping list of the Commission's long-standing positions on liberalization, energy, and the environment. It also positioned the Commission to set the agenda of future negotiations in the energy sector.

In October 2014, the member states agreed on another framework for climate and energy policies. Among the usual suspects were the reduction of greenhouse gases, the increase of renewables, and the boosting of energy efficiency (European Council 2014). Yet as is so often the case, the devil can be found in the detail. The preference gap between the member states was so vast that some aspects of the 2030 Framework were assigned to the authority of the European Council, which acts by consensus, such as negotiations on the further development of the ETS, investments into the infrastructure (interconnectors), and mandatory increases in energy efficiency. This is particularly interesting because it is in essence, *contra legem*. All energy provisions should be adopted in accordance with the ordinary legislative procedure (Art. 194 TFEU), that is, the EP and the Council acting upon a bill initiated by the Commission.

Uncertainty abounds about how likely it is that the Commission's long-term predictions will be realized, and while establishing a low-carbon economy seems to be desirable from an environmental point of view, some renewable energy technologies remain simply uncompetitive. Given the urgent need to secure the energy supply and the latest round of retreats from nuclear power by some EU countries, particularly Germany, it may prove problematic to stick to the Commission's 2050 vision.

Concluding remarks

This brief historical overview shows how the creation of a European internal energy market cycled between ambitious Commission proposals, rhetorical commitments by the European Council, and a suboptimal dedication to substantial changes by the Council. In the early years the tensions between those actors were accentuated by the enormous needs associated with Europe's post-war reconstruction. Coal was the energy source of the day. In the 1960s, there was little progress because energy issues simply were not very high on the political agenda. Cheap oil and optimism about the future of nuclear energy rendered the idea of an internal energy market intriguing, but not urgent. The oil crises of the 1970s changed

everything. Since then, European energy policy, understood as the sum of all national and supranational energy policies, has been driven by three broad aims: creating a fully integrated and liberalized European energy market; securing stable energy supplies at home and, where necessary, from abroad; and mitigating damage to the environment whenever and wherever economically feasible; in other words, the multidimensional pursuit of comprehensive energy security. There were many significant leaps forward and even more points of retreat in the building of a European energy policy. Its last great leap forward was its entry into primary law in the Lisbon Treaty, and its most recent setback has been the 2014 crisis over Ukraine.

Much of the credit for the progress goes to the Commission, which tirelessly pushed for greater understanding among the member states on the interdependence between energy security, economic stability, environmental conditions, and social welfare. Along the way, the Commission seized the opportunities that presented themselves to promote energy market liberalization, particularly in the gas and electricity sectors, through price transparency, coordinated investments in infrastructure, and the opening of the existing grids to alternative suppliers. It has led the way on the environment and where possible, used environmental laws to achieve its energy agenda. On top of its legislative and market achievements, the Commission has built over the course of more than five decades, an admirable, wide-ranging consultative network consisting of energy stakeholders, from producers, experts, and member state representatives to consumer groups. While prices and regulations still vary according to national needs and energy mixes, the variation is much less than it was decades earlier. Furthermore, European consumers have greater choice over who delivers which type of energy to their homes than at any time in the past. Nevertheless, resistance to the internal energy market project persists.

With respect to integration theory, the historical milestones show the complexity of the European integration process, a complexity too vast to be grasped by one single theoretical approach. One finds elements of Liberal Intergovernmentalism, Functionalism, and Institutionalism at play in the various stages of the energy policy-making process. National positions depend on national actor constellations, and the success of Commission initiatives depends on those national actor constellations, as well as external shocks. The internal dynamics of the European Council are dominated by

'high politics' (i.e. the international context) and national considerations. All of these institutions act within their very own bounded rationalities, resulting in a complex multilevel interplay of different political logics.

Finally, one would be remiss to underestimate the impact that external events have had on the evolution of Europe's energy policy. Instability in the Middle East and North Africa, the growing importance of the Caspian Littoral and the Arctic Sea, increased international competition for oil and gas, and the deeply contentious international climate change negotiations had and will have wide-ranging effects on its pursuit of all three pillars of comprehensive energy security. The creation of an internal energy market, for example, is not only a question of sustainable energy supply at affordable prices but also a question of strategic security in case of energy shortages. The only way to counteract the risk of disruption to the flow of supplies in any part of the Union, or from any one energy corridor, is to have the ability to move energy across the Union unimpeded; and that will require large investments into cross-border infrastructure. Pollution is a negative externality of energy production, no matter what the source or location. Some sources are cleaner and some are cheaper, but neither are both, and location merely delays its effect. Therefore, all energy initiatives, whether internal or external, will need to be executed alongside sustainable environmental policies; and those policies have to make economic sense. Lastly, in terms of supply security, it stands to reason that a Union of 28 member states would be best served if it were to develop a common external energy policy. Such solidarity would maximize its pull as a consumer and minimize the centrifugal tensions that tear at the Union's cohesion, as well as reduce other risks associated with individual bilateral energy relations. However, despite the fact that such 'a spirit of solidarity' is in principle enshrined in primary law (Art. 194 TFEU), 'energy solidarity' among the 28 member states remains very much a work in progress.

Chapter 4

Who Does What? The Main Actors

This chapter examines the actors involved in EU energy policymaking and illustrates the interdependence between the major players in the policy process, including formal and informal actors. Who are these key actors? How do they relate to one another in energy policymaking, and what instruments are available to them? Due to the divergent degrees of Europeanization in the different areas of European energy policy, the potential to influence the decision-making process differs considerably between actors. Energy policies in the EU primarily remain the responsibility of the member states and are an essential element of domestic politics, not least because any domestic economy is dependent upon reasonably priced electricity for manufacturing and private consumers need affordable home heating as well as fuel for their cars. Thus, domestic lobbying groups in modern democracies try to exert as much pressure as legally and reasonably possible on their governments in order to ensure that the actions and policy choices of that government (internal and external) reflect their interests. Governments, in turn, attempt to realize domestic interests in international negotiations and, in so doing, attempt to mediate between different levels. Putnam describes this two-level game from the perspective of government leaders as follows (1988: 434):

> Across the international table sit his foreign counterparts, and at his elbow sit diplomats and other international advisors. Around the domestic table behind him sit party and parliamentary figures, spokespersons for domestic agencies, representatives of key interest groups, and the leader's own political advisors.

Indeed, energy policy touches upon so many adjacent policy fields, from competition policy to industrial policy, environmental