1. Introduction

On 3 March 2011, the Third Energy Package (TEP) entered into force in the EU. In comparison to its predecessors, the package appears to be more focused on delivering an integrated energy market, in which regulatory processes across the Member States are coordinated and harmonized, the market interconnection is strengthened and the capacity of the Union to react in the eventuality of a supply crisis is reinforced. In this respect, the focus of the latest stage of the European Commission’s attempt to reform the European Union’s (EU) electricity and gas markets stretches beyond the mere liberalization of the energy market, towards the achievement of an integrated administration to govern an integrated EU gas market.

The goal of energy market integration – at times associated with or overlapping the goal of market liberalization – has been pursued to a certain extent by the EU Commission from the beginning of the energy sector reformation. However, the clarity of its articulation has been highly influenced by both internal and external factors. Over the last two decades, European energy markets in general, and gas and electricity markets in particular, have undergone an important restructuring process. During this process the role of market actors, the internal market structure and design, and the international energy context have evolved. This accumulation of economic, political and societal factors on national, regional and international levels has influenced and at times steered the direction taken by the European energy legislation.

1 In this sense, a real cross-border energy market is expected to emerge by pursuing regulatory methods targeting the establishment of entry/exit zones, market-based balancing and binding network codes.

2 The present text takes into consideration the changes brought about by the Lisbon Treaty to the three-pillars system of the European Union, which resulted in the European Community being absorbed by the European Union. As a consequence, the concept of “Union” or “European Union” is employed unitarily throughout the text and refers both to the present EU and to the former EC. The word “Community” is used either when it is an integral part of a quotation or a case-law, or as part of a bibliographical reference.

In the EU market restructuring has been performed mostly by means of regulatory reforms, aimed at creating the foundations of a comprehensive common energy policy, encompassing the needs of a single energy market. Starting with the 1990s, the importance of regulation in the implementation of sector reforms has gained momentum at the expense of state intervention. Such a development has occurred in an attempt to render investments in transmission networks more efficient, to enhance the operation of energy networks despite the dismantling of traditional network governance structures and furthermore to facilitate competition in the production and supply of energy.\textsuperscript{4} In this respect, several European Directives, Regulations,\textsuperscript{5} green papers, Court decisions, joint declarations and joint positions have been adopted. The internal market project has been built around the idea of developing a strategy simultaneously addressing energy security, economic efficiency and environmental protection issues within the European Union. In time, this should be accomplished by a coherent and coordinated European external policy in the field of energy, translated into a unitary position of Member States towards third parties in energy exchanges.\textsuperscript{6}

\textbf{1.1 GENERAL CONTEXT}

Certainly, the development of a comprehensive energy policy addressing legal, political, economic and social concerns has been neither singular nor restricted to Europe. A mere look at the energy policies of most developed countries shows important changes during the last decades, owing to climate change, energy efficiency issues and security of supply concerns.\textsuperscript{7} Specifically, the increasing global demand for energy,\textsuperscript{8} accompanied by a general decrease in the world’s traditional energy resources, has raised the awareness of policy-makers with respect to economic and political challenges resulting from an unequal partitioning of energy

\textsuperscript{4} Jamasb and Pollitt, 2008, pp. 4584–4589.
\textsuperscript{5} The term “regulation” can refer to both a specific form of legal tool and a mode of governance of the EU gas market. In order to distinguish between the two, the study capitalizes the term when referring to the legal tool.
\textsuperscript{6} The extent to which such endeavour has been successful is to be further discussed within the following chapters.
\textsuperscript{7} Schaffer, 2009, p. 9.
resources at a global level, associated with the concentration of major volumes of such resources in the hands of very few energy suppliers.

The competition for access to energy resources has always dominated international relations, notwithstanding the variations in energy demand.\textsuperscript{9} It could be maintained, however, that the necessity to draft an energy policy has grown as a direct consequence of an increasingly insecure energy supply. The geopolitical context serving as a background for the initiation of an energy policy at European level provides evidence in this sense. Specifically, it can be argued that the acceleration of the European processes leading to the establishment of an energy policy has been highly influenced by emerging doubts related to traditional energy resources and import dependencies on politically sensitive countries.\textsuperscript{10} As explained below, the geopolitical context has been accompanied by legal and institutional changes regarding the modes of governance at Union level, which in themselves favoured the adoption of such a policy. Nevertheless, considering the failure of previous attempts to forge a common policy encompassing all forms of energy,\textsuperscript{11} it could be further argued that Member States required an external motivation for pooling together their energy resources, while renouncing an important part of their sovereignty rights over them.

There is an intrinsic link between the availability of energy and the economic development of a society. This fact is perhaps best illustrated by the wealth gap between the richest and the poorest countries in the world and the scientific and societal advancements registered in the former during the last and current centuries. These could be easily connected to the availability of a multitude of energy resources and the facilitation of access to them. Paraphrasing the US Energy Secretary,\textsuperscript{12} it appears that the use of oil, gas and electricity in our modern society has resulted in each citizen of a developed country having the equivalent of roughly 100 servants working for them.\textsuperscript{13} It comes thus as no surprise that the guarantee of an uninterrupted access to energy resources and of the security of energy supply represents a core interest of energy policy designs all over the world.

\textsuperscript{9} Haghighi, 2007, p. 1.
\textsuperscript{10} Cronshaw \textit{et al}., 2008, p. 13.
\textsuperscript{11} For example, the Treaty Establishing the European Atomic Energy Community (1957) and the Treaty Establishing the Coal and Steel Communities (1951).
\textsuperscript{12} Dr Steven Chu, US Secretary of Energy between 21 January 2009 and 22 April 2013.
\textsuperscript{13} Crooks, 2009b.
On the EU agenda for establishing secure and integrated energy markets, the guarantee of a secure and reliable access to natural gas resources represents an utmost concern. Among European Union energy resources, natural gas constitutes an essential component, amounting to one-quarter of the primary energy supply and “contributing mainly to electricity generation, heating, feedstock for industry and fuel for transportation”\(^{14}\). During recent years, the stake of geopolitics in natural gas market arrangements has increased considerably. This is due partially to gas having grown from a marginally traded fuel, consumed within disparate town limits, to a fuel transported across great distances for the supply of a large variety of economic sectors.\(^{15}\) The increased dependency of different industries on the use of gas, together with the concentration of the majority of natural gas resources within the hands of very few world suppliers, has granted the fuel political characteristics it did not possess before.\(^{16}\) Closely related to the geopolitics of gas, but moving further towards the creation of an integrated European gas market and the establishment of a common set of rules that could govern the gas relationships among the EU Member States and between these and third-country suppliers, the EU has been involved in a law-making process, renewed and reviewed at regular time intervals since 1998.

It should be noted that, within the European Union, the development of a gas market is of relatively new origin, despite the use of gas for street and home lighting throughout northwestern Europe since as early as the nineteenth century.\(^{17}\) There are various reasons for this late development. These range from the late breakthrough of gas field discoveries in Europe to the lack of a sustained movement towards a real European energy market and an afferent common energy policy until the end of the 1980s and the beginning of the 1990s. Indeed until that time, it can be argued that the segmentation of gas markets along national borders had raised no polemics, similar to the monopolistic arrangement of national gas industries. Certainly, reliance on the welfare state as the sole regulator of the market – responsible for ensuring fair redistribution and taxation – coupled with the natural state sovereignty upon energy matters contributed to the maintenance of such a status-quo. That persisted even as the patterns of governance in Europe underwent significant changes, which later on resulted in the gradual shifting of vertical decision-making from national to supranational loci. As a consequence, the dawning of the gas

\(^{16}\) For a different opinion refer to Haghighi, 2007, p. 13.
\(^{17}\) Spanjer, 2008, p. 2.
market liberalization movement has seen industry and industry-oriented governments manifesting strong opposition to the liberalizing trend, while appearing resolved to maintain the existent market arrangements unchanged.\textsuperscript{18} That allowed a few national incumbents to enjoy an uncontested monopoly of energy production, transmission and distribution.

Notwithstanding an undisputed tendency to pool together essential national resources as part of the European integration, no aim of establishing a European common energy market was visible until the late 1980s. The strategic importance of energy sectors determined each Member State to guard fiercely its sovereignty in this field and to either discard with indifference or vehemently oppose any attempt of relocating decision-making related to energy policy at EU level.\textsuperscript{19} The change occurred during the 1970s, when the role of the positive state “as planner, direct producer of goods and services, and employer of last resort”\textsuperscript{20} began to erode as a consequence of rising unemployment and escalating inflation rates. Despite a new approach of addressing market failure through regulation, rather than state intervention, the latter was still regarded as legitimate in the field of energy until the mid-1980s. Such a legitimacy was maintained owing to security of supply anxieties generated by the two oil shocks of the previous decade.\textsuperscript{21} By the end of the 1980s, however, the EU was facing a deepening of the economic and monetary integration, which challenged the traditional modes of governance of Member States’ governments.\textsuperscript{22}

Indeed, the adoption of the Single European Act signalled that Member States acknowledged their incapacity to face international competition alone. It also announced the extension of the EU’s competences over areas previously reserved to state sovereignty. At the same time, the 1986 gas and oil price decline and the availability of substantial gas volumes in Europe, owing to increased efforts in exploration and production investments,\textsuperscript{23} lessened the leverage of the threat of resources scarcity on the security of Member States energy supply. As a direct consequence, the legitimacy of state intervention within the regulation of national energy industries became questionable. Additionally, an attained maturity of

\textsuperscript{18} Haase, 2008.  
\textsuperscript{19} Padgett, 1992, p. 55.  
\textsuperscript{20} Majone, 1997, p. 141.  
\textsuperscript{21} Spanjer, 2008, p. 9.  
\textsuperscript{22} Majone, 1997, p. 139.  
\textsuperscript{23} Cronshaw \textit{et al.}, 2008, p. 13.
European energy markets through the achievement of previously state-coordinated substantial investments brought the monopolistic structure of the market under scrutiny.

The dismantling of monopolistic gas market structures through European-led legislative and regulatory reforms has faced both open and disguised opposition from various industry stakeholders, much like the reformation of any network industry. Whereas the former type of opposition appears to have faded away between 1998, when the phased transition process to a single gas market began, and 2003, when a second European package of measures was adopted,24 the latter has subsisted until the present day, in a more or less pronounced form throughout the majority of EU Member States. The International Energy Agency (IEA) identified four general trends of industry stakeholders’ strategies to counteract the EU regulatory reform: acquiring assets in other countries in order to balance the loss of their national monopolistic market share, merging downstream local utilities on a national or regional basis, increasing mergers and acquisitions between gas and power companies and vertical integration of newly created pan-European energy groups.25 The effects of industry’s response to liberalization upon the sector regulation process have been visible in the findings of the Energy Sector Inquiry.26 The inquiry identified several obstacles hampering the positive effects of the first two cycles of energy reforms. These stemmed mostly from the energy market structure, differing or contradictory regulatory regimes across the Member States, the regulatory lag and poor EU energy market interconnection.

It would appear that the goal of an integrated European gas market that should have been achieved by 200727 still remains far from being attained. As argued in the following chapters, the partial failure of the initial legislative packages resided both in the conception and design of the energy market and afferent policy at an EU level, as well as in the response of Member States and national structures to these. Hence, it could be assumed that the potential success of the new energy package is to a great extent dependent on its capacity to address such matters. TEP seems to provide the necessary measures to correct the market failures of the past, but the effectiveness of their enforcement within the Member States is at the moment still unclear. In order to avoid a speculative

24 Cameron, 2005a, pp. 7–8.
27 Cameron, 2005a, p. 8.
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approach, the present study focuses on the actual degree of market integration and the legislative, institutional and policy tools used in forging it.

1.2 THE FOCUS OF THE BOOK

The book is concerned with the law and politics of the EU market of natural gas and particularly with the regulatory and competitive choices of institutions and bodies operating in the market, in view of rendering it more integrated. The analysis is not limited to the development of a common gas market, mainly from a competition law point of view, but takes the position that consideration of sectoral regulation as such is indispensable when analysing the gas market design and its afferent policy. Unlike other legal scholarship, the present study questions the validity of considering regulation as a temporary resource, which should in time be completely replaced by the application and enforcement of EU competition law. It maintains the basic notion of competition as being suitable for rectifying deficiencies in energy supply, but it advocates that its tools might not be sufficient to answer the specific needs of the gas sector. Accordingly, sector specific regulation might be more indicated to balance regulation-for-competition with the fulfilment of public service obligations, security of supply concerns and environmental and consumer protection, which might take place at the expense of the former. Hence, the application of both sector regulation and competition law might be necessary as long as the gas sector preserves its particularities.

The main question operated in the study is how regulatory and competitive choices influence the achievement of an integrated EU gas market and gas market design. When answering the question it has to be remembered that the application of competition law and specific sector legislation to the EU gas market, as well as their afferent institutional arrangements, does not occur in the protective confines of a legislative laboratory. Instead it takes place within a constantly evolving geopolitical perimeter, where gas supply relationships between market players are

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28 This refers to gas produced from conventional reservoirs, which is transported from producers to end-consumers through a pipeline grid or by means of liquefied natural gas tanks. It does not regard manufactured gas resulted from the transformation of oil or coal, or natural gas developed from unconventional reservoirs, which could themselves be the subject of distinct research.

29 See, e.g., Geradin, 2006; Larouche, 2006.
frequently renegotiated. Hence, the purely internal analysis of EU gas legislation and Member States gas regulatory regimes isolated from the geopolitical context seems to be insufficient. Having due regard to this, the book follows an interdisciplinary approach, in which legal and political science subquestions and theories are analysed and inferred. In this way, the research combines an analysis of causes and facilitating factors of market regulation choices with an inquiry into the effects of the specific legislative and institutional arrangements that such choices determine.

To satisfy the purpose of the main research question, the study suggests the structure presented below. Following the introduction, the second chapter provides the factual and legal benchmarks for the reformation of the European gas market, which help the placement of the present market integration development into an evolving legislative and geopolitical context. The chapter details the elements that make gas different from other network industries, before dwelling upon the legislative framework applicable to the development of an integrated gas market. In this respect, it explains the transformation of EU gas market regulation as a consequence of the substantive changes that have occurred in general market governance since the Single European Act.

The present directions taken by EU gas sector regulation are explained in the third chapter by looking at the process that has led to the adoption of the TEP. Subsequently, the chapter ponders upon the legal basis for EU intervention in the gas market. This is followed by an analysis of the setting of relationships with natural gas producers. The legal background of gas supply to the EU is discussed by referring to international law and agreements, the applicability of EU competition law to foreign gas undertakings and obligations and conditions issued from specific gas regulation. The focus moves gradually to a comprehensive case study on EU–Russia gas relationships.

The fourth chapter addresses the market structure in terms of the level of market concentration and the degree of market interconnection. The question guiding the chapter is how the instruments at hand can be better adapted to facilitate an integrated market structure. In this respect, the chapter first assesses the maintained foreclosure of the EU gas market caused by traditional and newly emerged market players and the entrenched characteristics of gas supply relationships. It does that by looking at the level of competition in the supply market. Second, it turns to discussing legal aspects contributing to gas market segmentation, while pondering upon the mechanisms that could correct gaps in market interconnection.
The fifth chapter moves onto the analysis of the market design achieved through liberalization. It does this by pondering upon the possibilities available to the actors active in the market in order to attain the goals of market integration. Such possibilities derive from both competition policy and sector regulation, and their various mixings exert a different scope in influencing the shape and functioning of the gas markets.

The sixth chapter is centred on integrated institutional arrangements. It first presents the individual bodies, their competencies, functions, resources, interaction, organization schemes and accountability, and then it discusses the shared competencies in the EU gas market. To a certain extent, it deals with implementation mechanisms and procedures from administrative rules to individual decisions. In this way, it infers cooperation procedures and information sharing and moves into discussing the more complex issue of integrated administration on the EU gas market.

The seventh chapter is dedicated to concluding remarks on the future of regulation in EU network industries. It encompasses an evaluation of European gas regulation. In light of the findings of previous chapters, this chapter attempts to observe to what extent the established normative goals are achieved using the legal tools available. Additionally, it attempts to formulate proposals for the harmonization of national and EU gas regulatory levels.