BI NORWEGIAN BUSINESS SCHOOL

The Centre for European and Asian Studies

REPORT

7/2011
ISSN 1500-2683

REGULATING FOR COMPETITION AND SECURITY: THE EUROPEAN ENERGY SECTOR

Nick Sitter, Department of Public Policy, the Central European University; and Department of Public Governance, the Norwegian School of Management BI

A publication from:
Centre for European and Asian Studies at
BI Norwegian Business School
0442, Oslo
Norway

Political Science Association, Annual Conference, London, April 19-21, 2011

REGULATING FOR COMPETITION AND SECURITY: THE EUROPEAN ENERGY SECTOR

In the early 1990s the European regulatory state took a 'public turn' as EU single market rules were extended to sectors that had been dominated by national monopolies. The liberalisation of the EU gas and electricity sector began, and the next two decades saw a series of new directives liberalising the sector further and the establishment of national regulatory agencies in all member states. The EU Agency for the Cooperation of Energy Operators became operational in March 2011. Yet the overall picture remains a mosaic: a more or less coherent picture made up of separate parts rather than a smooth and uniform picture. 1) Liberalisation has been gradual and uneven, both in terms of EU directives and their transposition and implementation, and in terms of the effect on the industry. 2) Although delegation to independent regulatory agencies is the universal pattern, there is considerable variation in terms of the legal remit, organisational structure, resources and practical independence of these regulatory agencies. 3) The very objectives of EU energy policy have proven more problematic than originally envisaged in the Commission's 1988 Green Paper on the internal energy market, which focused on overcoming the member states' protection of the industry from competition.[1] Whereas the original green paper emphasised the shift from state-dominated monopolistic national markets to an a European market dominated by competition, energy security began to dominate European energy policy in the 2000s. The present paper explores the changing priorities in EU energy policy, its effects on the European energy market and the robustness of the regulatory toolbox available to the EU and its member states.

1. The EU energy market: Fuzzy liberalisation?

Since Giandomenico Majone coined the term, the idea that we are living in the age of the regulatory state has shaped the study of public policy in the EU, and particularly the study of the utilities sectors.[2] The European Commission's continuous drive to expand the single market has been a free-market and rule-oriented project, driven by regulatory politics rather than policies that involve direct public expenditure. Both integration theory literature and literature on the development of the EU as a 'regulatory state' assumed that this was primarily a matter of policy *making*: once agreement had been reached to liberalise the utilities markets a relatively homogeneous process would follow. On the other hand, sector-specific studies (including the Commission's own reports) continue to reveal a less than fully homogeneous internal market. The EU has undergone momentous changes in the last two decades, which have rendered the notion of a homogeneous single market somewhat unrealistic. The de-politicised, homogeneous single market is at best an exaggeration, and more probably misleading. Mutual adaptation between the EU and its member states has made 'differentiated integration' and regulatory variation the norm, even when there is broad agreement on liberal market principles. The

[1] Commission of the European Communities, *The Internal Energy Market*, 1998, COM (88) 238.
[2] G. Majone, "The Rise of the Regulatory State in Europe", *West European Politics*, 17:3 (1994), 77-101; F. McGowan & H. Wallace, "Towards a European Regulatory State", *Journal of European Public Policy*, 3:4 (1996), 560-576; M. Lodge, "Regulation, the Regulatory State and European Politics", *West European Politics,* 31:1-2, 2008, 280-301.

energy sector provides a particularly useful illustration of this: because the nature of energy markets (particularly gas) meant that this would always be a difficult sector for the single market project, it provides a magnified version of some core challenges for the EU regulatory state.

Until the early 1990s, energy was generally considered a major policy failure for the EU.[3] The Commission's 1988 green paper on the Internal Energy Market concluded that the main obstacles to this goal lay in structures and practices associated with member state energy markets that protected the industry from competition. The introduction of a new EU policy paradigm, anchored in the single market project, challenged key elements in the existing system.[4] As recently as 1985, the white paper on the single market had excluded gas and electricity along with other utilities, partly a reflection of these obstacles.[5] The Commission's proposal for a directive on the liberalisation of EU natural gas markets 1992 drew sharp and critical reactions from most member states: as Jonathan Stern observed: "Many of the established actors in European gas industries […] regarded the introduction of liberalization as the equivalent of the end of civilization".[6] A revised proposal followed in 1994, and resulted in the first directives on electricity liberalisation (1996) and gas liberalisation (1998). The central question for gas liberalisation was third-party access to networks; and the compromise offered limited and gradual market opening with some scope for temporary derogations and member state discretion in implementation. The gas directive allowed temporary derogations over take-or-pay contracts upon decisions by states or their regulatory authorities, and for emergent markets or markets with only one external supplier. The Commission's liberal principles won the day, but at the cost of clarity and precision.[7]

The original directives were followed up by two further rounds of directives on gas and electricity liberalisation, in 2003 and 2009. The 2003 directive on gas required that that all states adopt a regulated access tariff, and establish independent regulators. In addition non-discriminatory third party access should be developed through legal unbundling of transport from trading services. At the time, only one of the then fifteen member states was judged to have completed market opening in the gas sector: the UK. Two years later a Commission report concluded that "the provisions of the previous Directives have not been adequate to achieve the objective of competition, even for larger users." Moreover, "the development of the internal market has […] been constrained by the continued existence of long term reservations of transmission capacity. The lack of coherence between the charging structure of

[3] Usherwood, Simon (1998), "Energy policy" in Glocker, Gabriel, Lie Junius, Simon Usherwood and Julian Vassallo*, Guide to EU policies* (London: Blackstone Press), Andersen, Svein.S. (2000) "Towards a Common EU Energy Policy", in Svein S. Andersen & Kjell A. Eliassen (eds.) *Making Policy in Europe,* second edition, (London, Sage).
[4] Dieter Helm (2007), "The New Energy Paradigm" in D. Helm (ed), *The New Energy Paradigm* (Oxford: Oxford University Press).
[5] Commission of the European Communities, *Completing the Single Market*, 1985, COM (85) 310.
[6] Stern, Jonathan P. (1998), *Competition and Liberalization in the European Gas Market. A Diversity Mode*l (London: The Royal Institute of International Affairs); S. Padgett, "The Single European Energy Market: The Politics of Realization", Journal of Common Market Studies, 30:1 (1992), 53-75.
[7] Svein S. Andersen and Nick Sitter (2009), "The European Union Gas Market: Differentiated Integration and Fuzzy Liberalization", in G. Fermann (ed) *Political Economy of Energy in Europe* (Berlin: BWW)

individual transmissions system operators has also prevented competition in some areas".[8] A third round of proposed directives followed in 2007, leading to the adoption of the third energy liberalisation package in 2009 with a focus on ownership unbundling, new regimes for independent systems operators or independent transmission operators, and an effort to strengthen national regulators and establish a new EU regulatory agency.

However, the European energy sector also saw the emergence and consolidation of large energy companies through mergers and acquisitions, joint ventures, or government support for national champions. Several governments, including those of Germany, Spain, Italy and France sought to protect and support their former monopoly incumbent companies, and a series of mergers and acquisitions have brought about big horizontal EU-wide companies as protected incumbents buy companied in smaller states. A number of mergers and acquisitions have also taken place across the electricity and gas divide (E.ON – Rhurgas; GDF – Suez), producing integrated companied that dominate the energy sector. Unbundling was delayed in most states, and indirect ownership forms circumvent such measures.

In 2011 the main challenge still remains the ability of incumbents to limit access to segmented energy markets. The introduction of a new regulator is an attempt to deal with the heterogeneity of national markets and political goals, identified in a series of Commission reports on the internal energy markets. The following points are excerpts from the 2010 report:[9]

- In 2009 the Commission initiated infringement procedures against 25 member states for electricity and 21 for gas, principally over matters of transparency, interconnection, enforcement action and dispute settlement (p.2).
- There is "concern that the current regulatory framework is not delivering effective oversight or sufficient transparency" (p.5).
- On high concentration in gas markets: "In 10 Member States, the three largest wholesalers have a market share of 90% or more" (p7). Something similar hold for electricity wholesale and retail markets; the Commission lacks data for gas retail markets.
- On national regulatory agencies: "Regulators should be given the necessary power to enforce compliance"; the infringements of 2009 addresses "the absence of effective systems of penalties at national level in the event of violations of the electricity and gas Regulations" (p.10).
- The Commission sent letters of formal notice to five states for "maintaining a system of regulated prices in violation of the EU directives on electricity and gas" (p.12).

The report concluded with the not-so-veiled threat that if needed "the Commission will not limit its actions to energy regulation and will not hesitate to use its powers under competition law." Indeed, Leigh Hancher and Adrien de Hauteclocque emphasise the Commission's power to use competition law to push large companies toward unbundling, even then national governments opposed this, but also

[8] Commission of the European Communities (2004), *Annual Report on the Implementation of the Gas and Electricity Internal Market*, COM (2004) 863, p. 3 and 7.
[9] European Commission (2010) "Report on progress in creating the internal market in gas and electricity", *Communication from the Commission to the Council and the European Parliament* Com (2010) 84 final.

warn that this approach might be problematic in terms of predictability (or lack thereof), legitimacy (accountability) and the focus on purely economic concepts.[10]

2. Regulating the EU energy market: Double delegation or re-politicisation?

The first and second energy liberalisation packages left the member states considerable discretion in terms of the scope and pace of liberalisation. National regulators and the big companies' market strategies became the key forces that shaped the trajectory liberalisation. As expected, during the 1990s some countries (including France and Germany) only partially transposed the directive into national law; others (Portugal and Greece) were granted derogations because of the emerging status of their gas industry; whereas some (Italy and Spain) actually went further than required, and the UK outpaced all the rest. Although the basic rules of the game had changed dramatically by 2000, the overall picture was mixed and reflected different national concerns. In effect, although EU-level liberalisation entailed three types of delegation from the member state to other levels or agencies, the national governments retained considerable influence over the further elaboration of the new liberal energy policy paradigm.

The first level of delegation was from national governments to the EU level, and more specifically to the Commission. However, although privatisation and liberalisation brought the electricity and gas sector under the remit of competition policy, in practice the main regulatory tasks were shared responsibility between the national and European level. The 1996 and 1998 directives envisaged that the regulatory role would be carried out in partnership between national regulatory authorities, competition authorities and the Commission. Most states opted to establish independent regulators for gas and electricity, with different degrees of room for political discretion and/or shared competence with competition authorities; the Commission was expected to play a key role in co-ordination between national regulators. The Commission itself foresaw an evolution towards a stronger role both for EU competition policy in this sector, particularly with respect to cross-border disputes and cases that affected trade between states. However, even at this stage it questioned whether competition policy would prove sufficient and suggested either increased co-ordination of the regulators or the establishment of a European Regulator.[11] These concerns were borne out in the Commission's 2007 report on the energy markets, which emphasised national segmentation, concentration within national markets, obstacles to new entrants, limited transparency, limited unbundling between network operators and suppliers, long-term contracts for consumers and limited balancing markets, most of which favoured incumbent operators. Hence its calls for a third energy package, and for an EU-level regulator.

[10] Leigh Hancher and Adrien de Hauteclocque (2010), "Manufucturing the EU Energy Marktes: the Current Dynamics of Regulatory Practice", EUI Working Papers RSCAS 2010/01.
[11] Commission of the European Communities, *Second Report to the Council and the European Parliament on harmonisation requirements*, Com (1998) 164 final.

In parallel with some delegation to the European Commission, the liberalisation of electricity and gas markets prompted a wave of delegation at member state level from governments to independent regulatory agencies. By the end of the 1990s most EU states had opted for energy-specific regulatory authorities (Germany initially left regulation in this sector to the Federal Cartel Office, but established an network regulator in 2005). However, as the above-cited excerpts from the Commission's 2010 report on the single market in energy illustrate, considerable variation between member states and gaps in terms of implementation of EU law remains in this sector.

The establishment of the Agency for the Cooperation of Energy Operators (ACER), which became operational in March 2011, involved a further step of 'double delegation'.[12] It replaced European Regulators Group for Electricity and Gas, which was set up by a European Commission decision in 2003, and involves 'double delegation' in the sense that the member states have delegated tasks first to the Commission and the national regulatory agencies and it is these organisations that are represented in ACER, not the member state governments. Its tasks primarily involve monitoring and reporting (e.g. the operation of the internal market, reviewing national rules), drafting (e.g. framework guidelines) and issuing opinions and recommendations (e.g. on network codes, technical rules); but it has decision making powers over cross-border issues in the event that national regulators fail to agree or they ask for ACER intervention, on exemptions for new interconnectors, and on technical issues related to the third energy package.

The three legislative packages and the establishment of independent regulators at both the national and EU level indicate that indeed liberalisation has become the new paradigm in the EU energy market. Nevertheless, building the single market remains a very gradual process, and it has yielded compromises that leave considerable room for national variation. Whereas the foundations for the regulatory state regime were laid in the early 1990s in a context of considerable optimism about the Single European Market at rule-based, non-interventionist governance, the late 2000s are seeing a degree of re-politicisation of the single market. At the policy level the Commission continues to push for a more integrated homogeneous market, but at the organisational level the structure, mandate, competences and resources of National Regulatory Agencies vary considerably. Unsurprisingly, so does implementation. However, the main challenge for the European Commission and advocates of a liberal single market for energy lies not so much in the nature of the regulatory tools and organisations designed to address competition and the completion of the internal market in energy, as much as in the expanding agenda associated energy security.

[12] Andy Tarrant and Kelemen, R. Daniel. (2007) "Building the Eurocracy: The Politics of EU Agencies and Networks", UACES conference, Montreal, Canada, May 2007; David Cohen and Mark Thatcher (2008), "Netwrok Governance and Multi-level Delegation: European Networks of Regulatory Agencies", *Journal of Public Policy,* 28:1, 49-71.

3. Energy Security: complement, trade-off or policy dilemma?

EU energy policy has always been linked to other policy areas, most notable competition policy, the internal market, industrial policy, security of supply and the environment. By the end of the 1990s it looked as if competition policy would gradually gain the upper hand. However, by the mid-2000s the threat of man-made climate change had moved to the top of the agenda, and by the end of the decade two gas disputes between Russia and the Ukraine (in 2006 and 2009) had helped propel energy security to the forefront too. Although it may be too early to say much about the effect of this on the single market for gas and electricity, considerable political attention has been be diverted from the internal market and resource-neutral competition to regulation of emissions and the use of renewable energy resources and to questions related to security of supply. The central question here, however, concerns the relationship between the wide range of objectives that now shape energy policy in the EU. The implicit assumption in much of the discussion of energy security is that the various policy goals are compatible and that the policy tools necessary (or available) to deal with them are complementary (reinforce each other) or at least compatible (do not obstruct each other). However, the literature on public policy and policy tools includes ample warnings that the use of a range of policy tools might entail trade-offs (solving more of one problem means solving less of another) or downright dilemmas (the choice of either policy tool leads to unsatisfactory outcomes).[13]

The key characteristic of the energy sectors – particularly the gas sector – is that a large share of the EU's energy resources is concentrated in a few non-EU countries. Hence the concern for supply and price stability.[14] However, although take-or-pay contracts should in principle be eliminated, price volatility and changes in short-tem demand has generated so much uncertainty over revenue from gas that take-or-pay contracts have remained an attractive means of financing new gas developments (especially if they involve long-distance transport of gas). Energy was therefore always going to be a difficult sector for the single market. In retrospect, the mid-1990s was the very opposite of a 'perfect storm': a brief period in which national, regional and international development combined to make for a perfectly calm situation that allowed the single market to be extended even to the energy sector. In terms of domestic politics this was the height of the New Public Management: the effort to reduce the size and scope of the state by way of privatisation and liberalisation.[15] This coincided with (or even drove) the EU single market project, and its 'public turn'. The collapse of communism, the end of the cold war, and low oil prices added an international dimension to the market-friendly context. In short, the mid-1990s was the high point of optimism concerning the general triumph of market-based rules, or

[13] Christopher Pollitt & Geert Bockaert (2004), *Public Management Reform: A Comparative Analysis*, (Oxford: Oxford University Press); Christopher Hood (1983), *The Tools of Government* (London: Macmillan).

[14] Estrada, Javier, Helge O. Bergesen, Arild More & Anne K Sydnes (eds 1998): *Natural Gas In Europe* (London: Pinter Publisher); Arentsen, Maarten (2004), "Politics and regulation of gas in Europe", in Dominique Finon and Atle Midttun (eds) *Reshaping European Gas and Electricity Industry: Regulation, Markets and Business Strategies* (Oxford, Elsevier 2004); G. Ferman, (ed). *Political Economy of Energy in Europe*, Berliner Wissenschaft-Verlag, 2009.

[15] Christopher Hood (1991) "A New Public Management for All Seasons", *Public Administration*, 69 (1991), 3-19; Ewan Ferlie et al (1996), *The New Public Management in Action* (Oxford University Press); Dieter Helm (2005), "Assessment: The Assessment: The New Energy Paradigm, *Oxford Review of Economic Policy*, 21(1), 1-18.

what Correljé & van der Linde call the "*Markets and Institutions"* approach to energy policy: an integrated, multilateral world with effective institutions and markets that sought to ties Russia to the single market.[16]

However, Correljé & van der Linde's key point was that by the mid-2000s Europe was closer to "a world broken up in rival political and economic blocs, competing for resources and markets via political, economic and military power", dominated by empires and regionalism.[17] Russia's turn from multilateral rule-based engagement with the EU and toward more a bi-lateral and politicised approach is perhaps more evident in the energy sector than any other sector.[18] With high energy prices in the 2000s Russian politicians and companies grew increasingly self-confident: the NordStream (agreed October 2006) and SouthStream (agreed April 2008 – seen as a rival to the EU-sponsored Nabucco pipeline) pipeline projects are a case in point: both have caused serious divisions in the EU. However, the global economic crisis has made it abundantly clear both that gas revenue is uncertain and that Russia depends as much on the EU as the EU depends on it.[19] The gas disputes with the Ukraine in 2006 and 2009 involved both a political and a business dimension. Gazprom's price rises hit Russia's neighbours irrespective of their political relations with Moscow. The extent to which these disputes should be taken to demonstrate Moscow's capacity to use energy supplies as a foreign policy tool is therefore contested.[20]

Consequently, the policy debate on energy security in Europe has developed from the focus on reliable and affordable supplies of energy to EU consumers (with a mild focus on limiting pollution) to a broader concern with the geopolitical and environmental aspects of EU energy policy.[21] The debate raised by the 1998 green paper and the Commission's effort to extend the single market to the utilities sectors focussed largely on the cost of energy and the need to secure uninterrupted supplies of electricity and gas to all consumers at prices that were socially acceptable (equitable across regions and with requirements for universal supply). Successive French governments' emphasis on the public service dimension of electricity and gas dominated the security of supply debate (and the public service criterion was even written into the EU treaty at Amsterdam in 1997). The environment dimension was a relatively weak component of EU energy policy in the late 1980s, although a number environment policy directives that had significant impact on the energy sector were passed in the 1990s and 2000s. The

[16] A. Correljé & C. van der Linde (2006) "European Supply Security and Geopolitics: A European Perspective", *Energy Policy*, 34:5, 532-543, p.532.
[17] A. Correljé & C. van der Linde (2006) "European Supply Security and Geopolitics: A European Perspective", *Energy Policy*, 34:5, 532-543, p.532.
[18] Aalto, Pami (2008), "The EU-Russian Energy Dialogue and the Future of European Integration", in Pami Aalto (ed.) *The EU-Russian Energy Dialogue*, (London: Ashgate); Romanova, Tatiana (2007), *EU-Russian Relations through the Prism of International Relations' and Integration Theories*: *Reflections on a Wider Europe and Beyond. Norms, Rights and Interests* (St. Petersburg: St. Petersburg State University), Stern, Jonathan P. (2005), *The Future of Russian Gas and Gazprom* (Oxford: Oxford University Press).
[19] M. G. Salameth, *Russia: An Aspiring Energy Superpower With Feet of Clay*, USAEE WP 09-018 February 2009.
[20] A. Goldthau & J. M. Witte, "back to the Future or Forward to the past? Strengthening markets adn rules for effective global energy governance", *International Affairs*, 85:2, 2009, 373-390; A. Goldthau, "Rhetoric versus reality: Russia's threats to European Energy Supply", Energy Policy, 26 (2008), 686-692.
[21] Frank Umbach (2010), "Global Energy Security and the implications for the EU", *Energy* Policy, 38:1229-1240, Larry Hughes (2009) "the Four 'R's of Energy Security", Energy Policy, 37:6, 2459-2464; A. F. Alhaj (2008), "What is Energy Security", *Middle East Economic Survey*, 51:2, see www.pteroleumworld.com

gradual strengthening of the EU's effort to integrate energy and environment policy culminated in the 2008 'energy and climate package', and the triple goals of a 20% reduction in greenhouse gasses, 20% increase in energy efficiency and 20% share of renewable energy in the EU market by 2020 eventually agreed at the 2010 June summit. By 2011 the concept of energy security had been extended from a focus on efficient pricing and public service to cover more explicit focus on short term disruptions (e.g. for political reasons or terrorism) and long term sustainability. The big questions this has raised are what policy tools the EU and its member states have to address these goals, and whether these tools are in fact compatible.

The short term security concerns are largely linked to potential sources of disruption of supplies. Whereas oil markets have long been subject to price shocks, and tools such as emergency stocks and spare capacity have been much discussed since 1973, the 2006 and 2009 gas disputed involving Gazprom prompted focus on interruptions of supply and a quest for diversification in terms of both production and pipelines. Since 2001 the traditional focus on coping with accidents has been extended to the question of how to deal with major terrorist incidents. The core policy tools include network regulation and safety rules, rules of oil and gas stocks, provisions for emergency measures and efforts to diversify sources of supply, pipeline routes for gas and to encourage spare capacity (notably in Saudi Arabia) for oil.[22]

Medium term energy security comes closer to the original goal of stable (and universal) supply at affordable (and socially equitable) prices. Efficient pricing can be seen as an EU-level public good, whereas social priorities and the duty to supply all customers are classical state-level public policy goals. Here the last two decades have seen a shift in policy tools from the public utility model of state investment and ownership and monopoly operators to the new EU model based on private operators, separation of network operation and supply, regulation by a combination of sector regulation and competition policy, with some continued scope for public service provisions. Although some challenges remain in terms of the internal EU market structure, the main challenges relate to information and infrastructure. Oil markets are global, but suffer from a basic shortage of information related to both supply and demand (e.g. in terms of China's consumption and production); gas markets are bilateral or regional and require long-term infrastructure investment (e.g. the question of Russia attracting finance for gas production and pipelines in the medium term). Whereas single markets rules are well place to address the first set of concerns (related to efficient and politically acceptable markets), they hardly address the information issues in oil markets (but the IEA does), and may actually inhibit long-term investment in gas markets to the extent that they limit the scope for take-or-pay contracts.[23]

[22] Chloe Le Coq and Elena Paltseva (2009) "Measuring the security of external energy supply in the European Union", *Energy Policy* 37:4474-4481.
[23] Richard Youngs (2009) *Energy Security: Europe's New Foreign Policy Challenge* (London: Routledge); Dag Harald Claes (2009) "EU Energy Security between Internal Market and Foreign Policy", ", in G. Fermann (ed) *Political Economy of Energy in Europe* (Berlin: BWW); Øystein Noreng, "Energy Security for Europe: A Choice of Suppliers and Partners", in G. Fermann (ed) *Political Economy of Energy in Europe* (Berlin: BWW).

Finally, long term security concerns are principally linked to the question of sustainable and affordable energy supplies. This includes at three dimensions, the first of which is linked to the medium term goals. Sustainable and predictable supply and demand is linked to fluctuations in energy prices (fluctuations may be short term; the insecurity thus generated is long term) and the establishment of resilient and adaptable systems for energy trade and transport. Key policy tools include investment and trade regimes, as well as data on energy markets (se above).[24] Second, the EU's dependence on oil and gas from external suppliers is often cast in terms of a strategic (or national security) security concern, with oil and gas seen as strategic commodities that are linked mot merely to markets but also to a broader set of foreign policy goals and tools and 'resource nationalism'.[25] Diversification is the most commonly cited policy tool; however, the de-coupling of oil and gas prices, the rising importance of shale gas (which limits the possible rise of gas prices) and alternative sources of electricity (primarily nuclear and coal, and to a lesser extent renewable) reduces the value of oil and gas as political tools. Third, the environment dimension is now at the forefront of long term sustainable energy policy. Key EU and member state policy tools include standards, taxes, regulation, emissions trading etc.; a further central question that is emerging is the political redistribution of the costs and benefits associate with the (desired) transition to low-carbon economies. In the words of Dieter Helm: "the problem is that there is too much fossil fuel, not too little – and that if we burn it all we will fry."[26]

The challenge that this expanded energy security agenda presents lies only partly in the difficulties involved in identifying the appropriate policy tools to deal with the short, medium and long term challenges of security of supply; the more difficult question is whether these tools are compatible or involved an element of balancing (if a trade-off) or outright choice (if a dilemma). The EU and its member states have developed robust tools for regulating for competition, and for the public service aspect of energy markets, even if energy market liberalisation has proceeded at considerably slower pace than the Commission anticipated in the early 1990s. Even a brief over view of policy objectives and tools indicates that the single market tools (competition policy, liberalisation, regulating access and tariffs) that make for a functioning internal market may be at odds with the policy tools (take-or-pay contracts, bilateral long-term deals between individual member states and Russia – or their respective companies) used in the quest for long term investment in production and pipeline facilities outside the EU. Although most environment policy tools (taxes, emissions rules, cap-and-trade) have been designed to be compatible with the single market, others (subsidies or quotas for renewables) involve trade-offs with other goals (cheap energy, efficient competition). In short, the EU regulatory system represents a robust model for regulating for competition and security of supply in the narrower sense that it was used in the early 1990s, but faces more significant challenges in the context of the broader energy security agenda of the 2000s.

---

[24] Daniel Yergin (2006) "Ensuring Energy Security", *Foreign Affairs*, 85:2, 69-82.
[25] Sam Raphael and Doug Stokes (2009), "Energy Security" in A. Collines (ed) *contemporary Security* Studies (Oxford University Press), Emil Krichner and Can Berk (2010) "European Energy Security Co-operation: Between Amity and Enmity", *Journal of Common Market Studies*, 48:4, 859-880; Gawdat Bahgat, "Europe's Energy Security: Challenges and Opportunities", *International Affairs*, 82:5, 961-975.
[26] Dieter Helm (2011) "look to gas for the future", *Prospect* March 2011.

Conclusion: the limits of the EU regulatory state

The single market was conceived – and largely implemented – in an era that was neatly summed up by Fukuyama's *The End of History* observation that market liberalism had triumphed in the ideological contest of the Twentieth Century. The challenge was to create multilateral institutional arrangements that would support economic development, liberal democracy and the globalisation of markets (both globally and in Europe). Much of the debate on the single market and the regulatory state – an indeed on European integration as such – took this as a basic premise. Even in this favourable context, European gas markets proved sufficiently diverse – and politicised – to render liberalisation a very difficult project. Nevertheless, by the end of the 1990s the liberal paradigm seemed to have gained a secure foothold, even if the liberalisation process was slow and the Commission's aims had been watered down. The 2000s saw a focus on implementation in the form of further liberalisation, and the establishment of an EU-level regulatory agency – ACER.

Effective regulation – and indeed the success of the regulatory state – depends on a degree of de-politicisation. It requires a degree of consensus on political goals, a relatively stable and predictable context, and a clear understanding of the rights and obligations of the industry. If these factors change, politicisation is likely to ensue. Three developments have brought about this kind of change: the uneven liberalisation of EU energy market, the increased focus on mitigating climate change, and the emphasis on geopolitical dimensions of energy security. The questions of climate change and stable energy supplies fundamentally altered the environment in which the EU regulatory regime operates. The policy tools available to deal with these questions are not necessarily compatible with the policy tools of the single market. And even if some of these questions might be resolved in the medium term, they have reintroduced the spectre of volatility into EU energy policy.

The regulatory state in Europe has proven relatively robust, at least compared to alternatives such as *dirigiste* industrial policy. However, this paper points to two important qualifications. First, even in the most favourable circumstances the energy sector features a range of characteristics that render depoliticised regulatory decision making difficult. Second, in any sector the combination of accumulated unresolved problems and new issues w prompt some actors to demand revision of the rules or seek to circumvent them. The national regulatory state can draw on more than the regulatory toolkit to try to handle such challenges. The question is whether the EU regulatory state can match this. Regulatory politics – like all politics – is indeed the art of the possible.