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Centro Einstein di Studi Internazionali
sul Federalismo, la Pace, la Politica del Territorio

Policy brief

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The Energy Policy of the European Union

What Challenges for the Future?

June 2014

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I. Introduction

The energy policy of the European Union is a mixture of national and EU framework policies, as it is narrowly linked to foreign policy and national sovereignty, as well as to climate policy. In this policy brief, we will try to summarize the main aspects of the EU energy policy (section II) and afterwards to dig into the main present and future challenges that the EU must face (section III). The aim is to identify the focal points that will or should shape the future of the EU energy policy, and to assess their relevance as regards both the domestic and the international levels.

II. EU energy policy

Energy policy may be described in different ways, but the concept is certainly not univocal. By this, we mean that energy policy includes aspects of other policy chapters and that it is itself the basis of many other policies. In the European Union, this may become an issue. In fact, the competences of the EU are divided in exclusive, shared (and mixed), and support competences¹, which means that energy policy might cover areas that are under different competence regimes, thus resulting in a ‘least common multiple’ solution providing for an overwhelming member states’ power, at the expense of a European common policy.

The Treaty of Lisbon places the energy chapter among the ‘shared’ competences.² Moreover, it identifies four main areas within the EU competences as regards energy, which are: the functioning of the internal energy market; security of energy supply; environmental aspects – renewable energy, energy efficiency; and infrastructure.³ This confirms not only the crosscutting character of energy policy, but also the fact that member states have the highest share of power in this field, as energy supply security is closely related to foreign policy, a renewed national stronghold. In fact, the Treaty provides for the use of the ‘special legislative procedure’ in case of “measures significantly affecting a Member State's choice between different energy sources and the general structure of its energy supply”⁴, which implies that the European Parliament must only be consulted and that the Council deliberates unanimously.⁵

This explains why the energy policy of the European Union has been mainly focussed on two of the four objectives stated in the treaty, i.e. the creation of an internal energy market and climate policy,⁶ both strongholds of the European Commission.

As regards the internal market for energy, in 2007 the European Commission proposed⁷ the *Third Package for Electricity and Gas markets*⁸ with the aim of realising an internal EU energy market by the end of 2014.⁹ The package included two Regulations and two Directives on both gas and electricity, and a Regulation establishing the EU Agency for the cooperation of National Energy Regulators. The Energy Package’s first main objective was the liberalisation of the internal market

¹ Cf. Title I, Treaty on the Functioning of the European Union (TFEU).

² Cf. Art. 4(2)(i), Title I, TFEU.

³ Cf. Art. 194(1), Title XXI, TFEU.

⁴ Art. 192(2)(c), Title XX, TFEU.

⁵ Cf. Art. 192(2), Title XX, TFEU.

⁶ Cf. Dreyer, I., Stang, G., *Energy Moves and Power Shifts. EU Foreign Policy and Global Energy Security*, EUISS, Report No 18, February 2014, p.51.

⁷ Cf. European Commission, “Energising Europe: A real market with secure supply”, press release IP/07/1361, 19 September 2007.

⁸ EC website: http://ec.europa.eu/energy/gas_electricity/legislation/third_legislative_package_en.htm

⁹ Cf. European Commission, “European Energy Security Strategy”, COM(2014) 330 final, 28 May 2014, p.8.

for energy, by unbundling the ownership and the supply activities of energy companies. The aim of this measure was twofold. On the one hand, with ‘unbundled’ national energy markets the Commission was trying to boost competitiveness within the EU, which should lead to more cross-border energy exchanges. On the other hand, this measure created some hurdles to foreign gas and energy suppliers – such as Russia’s Gazprom – because they would be subject to the same rules as European suppliers. This first market liberalisation objective should create the conditions for the second main objective of the energy package, which is the creation of a more integrated market where it is easier to shift supply from some EU member states to the others in case of a serious disruption in external supply. Hence, an integrated EU energy market was also aimed at fostering the security of energy supply for the whole EU.

In 2007, the European Commission also proposed the *2020 Climate and Energy Package*,¹⁰ which, for the aim of this policy brief, represents the environmental side of the European energy policy. This package covers the period 2010-20, and includes three main objectives: 20% reduction of greenhouse gas emissions; 20% EU-wide increase in the share of renewable energies in the member states’ energy mixes; and 20% reduction in energy consumption through energy efficiency measures. All this should be achieved by 2020, based on the 1990 data on emissions, renewables, and energy consumption. Though it is called ‘climate and energy’ package, the main focus is on climate policy. In fact, the first two objectives of the ‘20-20-20’ policy have been implemented with binding EU and national targets. The greenhouse gas emissions reduction target has been implemented with the Directive on the Emissions Trading System (ETS)¹¹ and with the Council Decision on Effort Sharing¹² for the sectors that are not included in the ETS scheme. For the implementation of the renewable energy objective, national targets were set in the Renewable Energy Directive.¹³ Although the objective of increasing the share of renewable energies is relevant for the European energy policy, in order for the EU to be more independent from external sources, the third objective on energy efficiency is also relevant. In this case an Energy Efficiency Plan and an Energy Efficiency Directive¹⁴ were adopted recently, but no national binding targets were set. The latest Directive came into force on 1st January 2014 and member states must implement it by 4th June 2014, and in the meanwhile present their *Energy Efficiency Action Plans* to the European Commission by 30th April 2014. This new ‘plan’ is the result of an ineffective policy in this field, as demonstrated by the fact that the EU is not heading toward the attainment of the 20% goal in the reduction of energy consumption, while it will probably achieve the two other objectives that are supported by binding national and EU targets.

Although we maintained that the EU energy policy has mainly focussed on environmental measures and the internal market, since the first energy supply disruption in 2006 – when gas supply from Russia through Ukraine was cut without warning – the European member states have developed a series of policy measures to tackle the problem of energy supply security. Hence, the first “Energy

¹⁰ EC website: http://ec.europa.eu/clima/policies/package/index_en.htm

¹¹ Cf. Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, as amended by Directive 2004/101/EC, Directive 2008/101/EC, Regulation (EC) No 219/2009, Directive 2009/29/EC.

¹² Cf. Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community’s greenhouse gas emission reduction commitments up to 2020.

¹³ Cf. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.

¹⁴ Cf. Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC.

Action Plan” for the period 2007-09, agreed by the European Council in March 2007, tried to strike a balance between competitiveness, environmental sustainability, and security of supply.¹⁵ After this first ‘action plan’, these three parallel objectives have always been the basis of the Commission’s proposals, starting with the *2020 Climate and Energy Package*. However, the ‘security pillar’ of the EU energy policy has remained mainly a national prerogative, thus the weakest one, due to the close relation between energy supply security and foreign policy.

Notwithstanding the difficulties, the European Commission has continued to work also on the security dimension of energy policy. At the end of 2011, it published an *Energy Roadmap 2050*, which “seeks to develop a long-term European technology-neutral framework”¹⁶ and to consider the climate change issue with a broader perspective on energy policy, especially for the period after 2020. Most importantly, in January 2014 the European Commission proposed a new *Policy framework for climate and energy in the period from 2020 to 2030*.¹⁷ This document is the starting point of the EU legislative process for the new climate and energy policy, after the very ambitious targets set with the current policy. The new framework proposal keeps the binding target of reducing the greenhouse gas emissions to 40% by 2030, which should be implemented with a revised ETS Directive. However, while it sets an EU-wide binding target for the increase in the share of renewable energies (27%), it does not provide for binding national ones. Furthermore, and most relevant for the scope of this work, the new policy framework focuses on energy policy more than the previous one, namely energy markets, competitiveness and affordability of energy for consumers, and the promotion of the security of energy supply. However, as regards energy supply’s security it is not clear if the European Commission foresees to engage the EU with tangible actions, or if it is intended to be a reminder for member states to diversify their energy sources, to invest more on indigenous energy sources, and to be more engaged in attaining the reduction of energy consumption. Besides, on this last point the Commission does not make any new proposal, maintaining that this will possibly be made after the assessment foreseen by the Energy Efficiency Directive, to be made in the second half of 2014.

Nonetheless, it is not secondary that the new policy framework proposal considers the possibility for the member states to explore and possibly exploit shale gas, a highly controversial new source of natural gas, which represents a revolution in the energy sector, after the United States started to exploit it profitably. Due to the concerns about the environmental viability of the exploitation of shale gas, the Commission published a Recommendation¹⁸ “for the safe and environmentally secure exploitation of shale gas.”¹⁹

Finally, a renewed interest and focus on the security of energy supply can be found in the *European Energy Security Strategy*,²⁰ published by the European Commission on 28th May 2014. Clearly, this is a reaction to the new international context, where Russia is starting to represent an element of instability and possibly a threat, after its invasion of the Ukrainian region of Crimea and the support of the secessionist stance of the latter.

¹⁵ Cf. Umbach, F., “Global energy security and the implications for the EU”, *Energy Policy*, Volume 38, Issue 3, March 2010, Pages 1229–1240, here p. 1234.

¹⁶ European Commission, “Energy Roadmap 2050”, COM(2011) 885 final, 15 December 2011, p.3.

¹⁷ Cf. European Commission, “A policy framework for climate and energy in the period from 2020 to 2030”, COM(2014) 15 final, 22 January 2014.

¹⁸ Cf. Commission Recommendation of 22 January 2014 on minimum principles for the exploration and production of hydrocarbons (such as shale gas) using high-volume hydraulic fracturing (2014/70/EU).

¹⁹ COM(2014) 15 final, doc.cit., p.12.

²⁰ Cf. COM(2014) 330 final, doc.cit.

III. Present and future main challenges

The present international and domestic EU context raises some important challenges for the EU energy policy. In fact, as the Copenhagen international climate negotiations showed, the EU and the U.S. are not the only relevant global actors in this field anymore. China is today the largest greenhouse gas emitter with a 29% share of global emissions, followed by the U.S. (16%) and then the EU (11%). India ranks fourth, with a 6% share.²¹ This proves that the developing countries are getting closer to the industrialized countries of the OECD club, and that their energy consumption will continue to grow according to the growth rate of their economies. This has already provoked a rise in energy prices, even though on the natural gas market this has been counterbalanced by the shale gas revolution in the U.S., which introduced more natural gas on the global market, thus provoking a global price drop.²²

Moreover, the presence of new important global energy actors has had the effect of reinvigorating a “resource nationalism”²³, within the context of energy geopolitics. It should not be forgotten that in order to overcome the old hatred among the European countries after World War II, the first effort for pacification was the creation of the European Coal and Steel Community. And if history was not enough, the current turmoil in Ukraine, and the strive between the EU and Russia over the Ukrainian crisis prove what the consequences of resource nationalism might be. Thence, energy geopolitics may really be a source of instability and global confrontation.

What is more, the presence of new global energy customers is a direct concern for an actor like the European Union, which is highly dependent on energy resources import (53% of its total energy consumption²⁴). The EU is still today a “price taker” rather than a “price maker” in global energy markets, because of its fragmented internal energy market, which hinders its ability to negotiate as one single actor with its energy suppliers. On the other hand, China is already establishing itself as a strong energy negotiator, as demonstrated by the thirty-years gas supply deal signed by the Chinese Prime Minister and the Russian President earlier this month.²⁵

The activism of China and of other new global actors in the energy field, and the new shale gas resources of the United States have a direct impact on the domestic EU context. Actually, the EU industry and individual consumers pay a higher price for electricity and fuel than the US counterpart. Moreover, according to the European Commission “price differentials with countries such as China and Korea are not increasing but comparative disadvantages still exist.”²⁶ If this situation persists, the EU industry’s competitiveness will weaken. In the last years, the high oil prices boosted the research in alternative energy sources, notably renewable energies, thus having a positive impact on the creation of indigenous resources. However, if the divide between the energy sources price paid by the EU and by other countries will widen, the consequences might be less positive. Moreover, there are other factors that might push the prices upwards, notably the “need to replace energy infrastructures”²⁷ in Europe and the “depletion of North Sea gas sources”²⁸, thus resources within the European Economic Area (EEA).

²¹ Cf. COM(2014) 15 final, doc.cit., p.17.

²² Cf. Dreyer, Stang, loc. cit., p. 26.

²³ Umbach, loc. cit., p. 1232.

²⁴ Cf. COM(2014) 330 final, doc.cit., p. 2.

²⁵ Cf. Perlez, J., “China and Russia Reach 30-Year Gas Deal”, May 21, 2014, International New York Times. URL: <http://nyti.ms/Si2VVe> (retrieved on May 22, 2014).

²⁶ COM(2014) 15 final, doc.cit., p.10.

²⁷ Ibid., p. 11.

Thence, one of the most relevant challenges for the EU is to provide for the conditions to have **lower energy and fuel prices** for the EU industry and individual consumers. Even though the international dimension of this challenge seems to be predominant, the measures to be taken are mostly domestic. First, the EU needs to invest in R&D related to renewable energy, carbon capture and storage (CCS), and smart grids. A further development of renewable energy technology would reduce the EU dependence on foreign energy sources, but smart grids are necessary in order to be able to exploit the full potential of renewables, which are intermittent electricity sources, and thus require a system that makes it possible to have a continuative energy flow. The development of CCS technology would allow using indigenous but polluting resources, namely coal, without consequences on the environment thus contributing to the reduction of the share of imported energy sources. Second, the EU needs investments in infrastructure for transport and for storage of energy, especially with the objective to achieve a fair level of security of energy supply, but also with the aim of creating a true internal energy market. This would be a reality only when the transport of energy sources across the borders of EU member states will not be a problem anymore, in particular for those energy sources like natural gas or renewables, for which the transport is not flexible at all. The internal gas and electricity market should be fully established by the end of 2014,²⁹ but observers say that this is unlikely.³⁰ Third, the EU needs a common energy policy, in order to be able to negotiate on an equal footing with other global energy actors. In fact, the internal market fragmentation and the domestic constellation of interests hinders the possibility for the member states to pay the same price for imported energy resources, or to have a strong stance facing their interlocutors. However, the energy mix of the EU member states varies a lot from country to country, and the trade preferences, linked mainly to national corporate interests, are fairly heterogeneous. Thence, this third point makes it all the more clear that domestic and international issues are intertwined, as “a truly internal energy market is a prerequisite for a common external energy policy.”³¹

Russia’s continuous interference in the domestic policies of other countries of the former Soviet Union, notably in the Caucasus and in Ukraine, probably aimed at fomenting instability in the region to obstruct the EU projects for the diversification of energy sources, has clearly raised another challenge for the EU. The energy interdependence between the EU and Russia unfortunately did not lead to a cooperative relation between them, rather, to a geopolitical strife at the EU’s external borders. The project of an Energy Community, launched by the EU in 2005, did not manage to engage Russia, while it was successful with the other EU neighbours, in that it managed to extend to non-EU countries the EU policies in the energy field.³² Thence, the challenge for the EU is the **security of energy supply**, as the Council and the Commission already realised.³³ Certainly, there is not a univocal response to this challenge, but we can try to distinguish between an external and a domestic dimension of a possible response. On the domestic level, the EU member states should be more engaged in attaining the EU target for the reduction of energy consumption, by properly implementing the Energy Efficiency Directive. Moreover, as discussed above, the further development of renewable energies and of other indigenous energy sources complements the efforts for energy efficiency. This would help diversifying the energy sources of

²⁸ Kirchner, E., Berk, C., “European Energy Security Co-operation: Between Amity and Enmity”, *JCMS* 2010 Volume 48. Number 4. pp. 859–880, here p. 862.

²⁹ See Section II above.

³⁰ Cf. Dreyer, Stang, loc. cit., p. 52.

³¹ Kirchner, Berk, loc. cit., p. 860.

³² Cf. Dreyer, Stang, loc. cit., p. 55.

³³ See above: European Energy Security Strategy.

the EU member states, but also reducing the EU reliance on energy import. On the international level, the EU would be seen as a cooperative actor if it could recover its general foreign policy objective of ‘effective multilateralism’. Actually, a global multilateral regime on energy policy currently lacks, one that could solve the problem of the “almost unbridgeable gap between exporter and importer interests.”³⁴ The International Energy Agency (IEA) is open only to OECD countries, while it is clear now that non-OECD countries now represent a fair share of the global energy market. The Energy Charter Treaty, an EU initiative, was meant to be global, but it actually remained mostly Europe-centred. Then there are other sectorial agreements or organisations, such as the International Atomic Energy Agency (IAEA), which cannot adopt an holistic approach though.³⁵ A functioning multilateral energy regime would reduce the tensions between the different actors and would also facilitate the management of energy routes. To the present day, the efforts have not been successful, but the international context was completely different from the present one. First of all, the positioning of global actors changed, both because of the rise of new actors (e.g. China) and because the U.S. has shifted from a position of importer country to being an exporter country. In this changing scenario, it is meaningful to notice that there might be a higher probability of a commonality of interests between the EU and China, rather than between the EU and the U.S.³⁶ Secondly, during the great oil crises of the 1970s the European Union did not exist as such. Today, with a political will to move the EU energy policy toward a true common energy policy, the European Union could make the difference as fully-fledged global actor, which acts as a mediator, in order to bring together the different positions, thus establishing at least a global multilateral forum for the discussion of energy issues.

IV. Conclusion

This text is a short *excursus* on the European energy policy and on the present and future challenges that the EU must face. We do not pretend that every issue related to energy policy fits in this policy brief, but at least we tried to present the most important challenges, while keeping the debate open for further discussion. Section II showed that there is a very high number of EU policies, frameworks, binding and non-binding documents and targets. At the same time, even though this plethora of provisions might testify of a willingness on the part of the European Commission to take action, certainly it does not ensure a relevant energy policy to the EU. As we explained at the beginning, energy policy is still predominantly a national competence, although it seems that at the present time member states are becoming more inclined to the idea of an effective common energy policy.³⁷ Another aspect that can be retained, and that would also be easily expected, is the strong relation between energy and climate policy. This notwithstanding, in the EU the decisional *locus* of the two policies is different, and for this reason, also the degree of their Europeanization is different, with a fairly Europeanised climate policy, and a mainly national energy policy. However, were the EU to play in the energy field the same role as the one it plays in the global climate change negotiations, it would perhaps manage to lead toward a more cooperative international context. It might be that this will be the next stage of the EU energy policy.

³⁴ Ibid., p. 30.

³⁵ Cf. Ibid., p. 29-31.

³⁶ Cf. Ibid., p. 15-16.

³⁷ Cf. Ibid., p. 11; COM(2014) 330 final, doc.cit., p. 17.