



BACKGROUND PAPER

*A more coherent European energy action:
Three intertwined dimensions*

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Background Paper

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Three intertwined dimensions¹***

Introduction	3
Energy as a EU foreign and security policy issue	3
The distinct but overlapping dimensions of EU energy security	4
The regional external dimension	5
The EU external energy dependence and related vulnerabilities	5
The evolving relations with traditional partners: new challenges for the EU	5
Looking for alternatives: enhancing cooperation with new potential suppliers	7
The internal and trans-border dimension	9
The internal-external nexus in energy security: challenges for a 28-state European energy market.....	9
European efforts to strengthen internal resilience: an infrastructure policy to address external challenges.....	9
An outward-looking development of the European energy regulatory framework.....	10
The global dimension	12
Facing increased competition in the international energy arena	12
A strong EU energy diplomacy for a new global energy governance	12
The EU as global leader in climate action: between ideology and pragmatic action.....	14

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Andrei Tarnea and Mihnea Constantinescu have offered suggestions and comments on the draft.

Introduction

Energy as a EU foreign and security policy issue

The European Union (EU) is the world's largest importer of energy resources, and the economic area most dependent on external hydrocarbon supplies. In the last decades, this condition has clearly contributed to shape the European external policy approach and the definition of the EU bloc's security priorities.

The inclusion of energy among the challenges to the foreign and security policy of the EU dates back to the European Security Strategy (ESS) *A Secure Europe in a Better World*, adopted by the European Council in 2003.² However, it is only with the release of the *Report on the Implementation of the European Security Strategy* in 2008, that energy was listed among the Key Threats to Europe's security interests.³ The document, inspired by the first gas crisis between Russia and Ukraine in 2006, placed strong emphasis on the high level of external dependence, as well as the need to develop a EU energy policy, which combined the internal and external dimensions. Furthermore, the Report focused on the urge to strengthen energy diversification by engaging traditional and potential suppliers (i.e. Central Asia, the Caucasus and Africa) and by investing in the expansion of European energy sources and a buildup of gas and electrical grid interconnections.

Events such as the conflict in Ukraine and the so-called Arab Spring uprisings, however, have deeply influenced the framework for cooperation. The European Union, therefore, has decided to reinvigorate its external energy action through the adoption of its first ever Energy Security Strategy, published by the European Commission in May 2014.⁴ The Energy Union is partly designed to revitalise the EU's Energy Diplomacy⁵, and in this context the Council has adopted, in July 2015, a *EU Energy Diplomacy Action Plan*, taking full account of the increasing competition for energy resources at the global level. The plan, in particular, aims at strengthening European capacities in order to promote new energy partnerships and dialogues, support the EU's energy diversification efforts, and enhance a renewed global energy architecture, as well as multilateral initiatives.

² European Council, *European Security Strategy – A Secure Europe in Better World*, Brussels, 12 December 2003. <http://www.consilium.europa.eu/uedocs/cmsupload/78367.pdf>

³ European Council, *Report on the Implementation of the European Security Strategy - Providing Security in a Changing World*, Brussels, 11 December 2008. https://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressdata/EN/reports/104630.pdf

⁴ European Commission, *European Energy Security Strategy*, Brussels, 28 May 2014. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014DC0330&from=EN>

⁵ European Commission, *Energy Union Package - Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank: A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy*, Brussels, 25 February 2015. http://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC_1&format=PDF

This is the context – at the EU level – of ongoing discussions on how to enhance the coherence and effectiveness of European energy policies. Despite the growing awareness of the significant role of energy policy in the international projection of the EU⁶, it is clear that many key decisions in this area are still shaped by national governments and national companies. Differences in priorities and perceptions have been notable especially in setting strategies for gas supply, designing future energy infrastructure, and rigorously applying the EU legislation to new projects and assets.

The distinct but convergent dimensions of EU energy security

The EU's energy security is determined by the interaction of three different but interconnected dimensions.

As the majority of the EU energy supplies comes from and transits through neighboring countries, the regional dimension assumes a vital relevance for European energy security. One third of total oil, natural gas and coal imported by EU countries is supplied by Russia, whilst neighbors like Norway, Algeria and Libya contribute significantly to meet the European energy demand, particularly concerning gas resources. This geographical reality, even by itself, requires the EU to establish a coherent energy policy that goes beyond its borders (i.e. a foreign policy), in order to actively and positively engage in the process with not only its key energy suppliers but also strategic transit countries such as Ukraine and Turkey.

Regional action, however, cannot be fully implemented if not supported by consistent policies within the internal dimension. Indeed, the functioning of a fully integrated and interconnected internal energy market represents the "best insurance" for the EU and its Member States against potential shocks and disruptions on the external supply side. At the same time, the progressive integration of key energy partners within the EU internal energy market - either through multilateral mechanisms, such as the Energy Community (the international organization which entered into force in 2006, now comprising 8 Contracting Parties plus the EU: Albania, Bosnia and Herzegovina, Kosovo, Former Yugoslav Republic of Macedonia, Moldova, Montenegro, Serbia and Ukraine), or through ad hoc initiatives like in the case of Norway – contributes to reduce the vulnerabilities caused by the external dependence of the EU. The two dimensions are clearly intertwined.

Ultimately, the emergence of new major energy consumers such as China and India together with the increasing international competition over energy supplies, requires the European Union to act globally in order to strengthen its energy security. Creating new partnerships with international energy suppliers, as well as joint mechanisms for the management of energy crises and supply shortage with global competitors, are two necessary steps to enhance Europe's energy security. In addition, given its ambition to act as the global leader in climate change and green policies-related issues, the EU is expected

⁶ Antonio Missiroli (Eds.), *Towards an EU global strategy – Background, process, references*, EUISS, Brussels, September 2015. http://www.iss.europa.eu/uploads/media/Towards_an_EU_Global_Strategy.pdf

to establish cooperative frameworks with third countries in order to facilitate their energy transition processes. Such engagement will eventually contribute to a more secure and sustainable global energy sector.

The regional external dimension

The EU external energy dependence and related vulnerabilities

According to the data provided by the European Commission, in 2013 the EU imported around 53% of its energy for a value of €400 billion.⁷ Today, more precisely, European countries import around 90% of their oil consumption, 65% of their natural gas demand and 44% of their coal reserves. Hence, the EU is the world's largest importer of energy resources.

The considerable need for external hydrocarbon supplies, in particular, makes the EU dependent on politically unstable countries and regions, within a framework of increased competition at the international level. The race to access and secure scarce energy resources is perceived as the greatest vulnerability of the EU in the energy domain. On the one hand, this situation may have direct implications for the physical security of energy supplies towards the EU, possibly endangering the activities of European companies (especially in the energy-intensive manufacturing sector) and the lifestyle of European citizens. On the other hand, this context may indirectly expose the EU to risks related to energy prices, that would negatively affect the international competitiveness of European industry, already hit by years of economic crisis.

Despite the recognition of these existential vulnerabilities, so far the European Union has struggled to define a coherent external approach vis-à-vis its regional energy suppliers. The Member States' determination to individually defend their sovereignty and national interests in the energy domain came to notice in the provisions of article 194.2 of the Lisbon Treaty. This grants Member States the ultimate right to determine the conditions for exploiting their energy resources, the choice for different energy sources and the general structure of their energy supplies. Therefore, the Treaty's provisions contribute to constrain the EU's capacity to speak and act unanimously on external energy matters, potentially facilitating divide-and-rule efforts by some supplier countries.

The evolving relations with traditional partners: new challenges for the EU

The majority of the EU energy supplies comes from and transits through neighboring countries. The natural gas sector is the most critical for Europe's energy security. Unlike oil and coal - which are global commodities, traded in liquid international markets, and for which the EU has developed a well-diversified portfolio of suppliers – natural gas is still predominantly traded as a regional commodity. Its transportation and distribution is

⁷ European Commission, *Energy Union Package*, 2015.

ensured mainly by pipelines, which are fixed infrastructures. Therefore, gas is more often subject to transnational political disputes. Notwithstanding the increasing role of liquefied natural gas (LNG) supplies at the global level, the EU gas imports are highly dependent on a limited number of traditional regional suppliers, namely: Russia, Norway, Algeria and - to a lesser extent – Libya. In 2014 these four countries accounted for 90% of total EU gas imports, with the rest being covered by LNG.⁸

Much of the EU's concerns about energy security are related to the high degree of dependence on gas import from Russia. Moscow supplies roughly one third of the crude oil, one third of the coal, and one third of the gas consumed at the EU level. In the gas sector, in particular, a group of central and eastern European countries depends on Russian supplies for 70% to 100% of its total gas consumption. The energy security of these countries⁹ is endangered by the fact that the totality of gas transits through Ukraine, and given the political tension between Moscow and Kiev, the stability of Gazprom's supplies is regularly called into question. Russia's gross violation of Ukraine's sovereignty and territorial integrity compounds its propensity for using gas transit as a political instrument. The recent pattern of behavior raises legitimate questions regarding Russia's role as a partner for Europe in energy. In the last months, the EU has brokered a set of negotiations between the parties to reach an agreement on the gas supplies to Ukraine and on the transit towards the EU. Despite these initiatives, the situation remains uncertain, as the transit contracts between Gazprom and Naftogaz will expire in 2019. On that date an agreement will need to be re-negotiated to avoid – as threatened by Moscow – the suspension of the transit from Ukraine to the detriment of secure supplies to EU's Member States. Some new possible alternatives have been put forth, and include the expansion of the Nord Stream pipeline and the realization of the Turkish Stream project (in order to replace the South Stream pipeline blocked by the Russian government in December 2014). Some member states are cautious about alternative routes given the direct and indirect political and security costs, while the EU Commission has voiced its concern for the impact of these projects on the fundamental principles that underpin the Energy Union.

The socio-political tensions on the Southern shores of the Mediterranean contribute to complicate the EU's energy security picture. New gas discoveries in the Eastern Mediterranean (most recently in an Egyptian giant offshore reserve) and the prospects of a new flow of Iranian energy export create opportunities, but stability and security remain a long term concern. Indeed, the aftermath of the so-called Arab Spring has seen an extraordinary level of regional instability – extreme in the case of Libya – but also a certain degree of uncertainty in countries such as Algeria. Libya and Algeria contribute

⁸ European Commission, *Quarterly Report Energy on European Gas Markets - Market Observatory for Energy*. https://ec.europa.eu/energy/sites/ener/files/documents/quarterly_report_on_european_gas_markets_2014_q4.pdf

⁹ Poland is not part this group, since its gas supplies transit through Belarus. The group also includes Austria, Greece and Italy.

cumulatively to about 10% of total EU gas imports and 8% of total crude oil imports¹⁰, and political transitions, even if relatively smooth, could directly affect the energy supply policies pursued by some EU Member States, such as Italy and Spain. Since 2011, Libya's oil exports to the EU have dropped by 70% and the stability gas flows to Italy through the Greenstream pipeline have been repeatedly threatened by security factors. Meanwhile, the emergence of the Islamic State across North Africa increased the unpredictability of the regional security context, also threatening countries such as Algeria..

Looking for alternatives: enhancing cooperation with new potential suppliers

The picture described above forces the EU to identify new sustainable options to diversify its supplies and enhance its energy security. Some of these options are already on the table, and need just to be better or fully implemented; others require more complex efforts to establish new partnerships and exploit complementarities and mutual interests.

The former certainly include LNG, which is currently part of the EU energy mix, accounting for roughly 10% of total gas imports. The expansion of the regasification capacity would provide the EU with greater flexibility, by broadening the set of potential suppliers – including the United States - and significantly reducing the dependence on the few traditional, and possibly unstable, energy partners. A concern here is that through a larger number of LNG supplies, the EU would also import price volatility and price spikes determined by the competition of Asian customers. This could ultimately affect the competitiveness of the already fragile European economic recovery.

In addition, the EU is involved in the Southern Gas Corridor initiative, a network of pipelines aimed at connecting the European markets to the abundant gas resources located in the Caspian Sea and the Middle Eastern region. By 2020, 10 billion cubic meters of Azerbaijani gas are expected to reach Italy and other South European countries, eventually opening up a path for new pipeline supplies for Europe.

Iran, holding the world's second-largest natural gas reserves, is among the candidates to supply Europe through the Corridor. After the nuclear deal reached with the P5+1 group¹¹ and the potential lifting of the international sanctions, many Europeans are hoping to see Iran exporting its abundant gas resources through the Southern Gas Corridor. However, this possibility risks to be constrained by the geographical location of the Iranian gas resources. These are situated in offshore fields in the southern part of the country, and more easily exportable through LNG across the global gas markets – including the European one - rather than via thousand kilometers of pipelines.

After the substantial discoveries offshore Israel, Cyprus and Egypt, the East Mediterranean region has become another potential contributor to the development of the

¹⁰ Before the political turmoil started in 2011, Libya was the third crude oil supplier for the EU behind Russia and Norway, accounting alone to 10% of total EU imports. In 2014 the share dropped to 3,5%.

¹¹ The P5+1 group that has negotiated the deal with Iran includes the 5 permanent members of the UN Security Council plus Germany.

Southern Gas Corridor. However, both the region's complex political framework and its fragile economic environment are currently affecting the exploitation and export strategies of East Mediterranean natural gas resources. Turkey, in this context, serves as a pivotal actor: on the one hand, its role in the dispute between the internationally recognized government of the Republic of Cyprus in Nicosia, and Turkish Republic of Northern Cyprus (TRNC) limits the development of Cyprus' offshore hydrocarbon reserves; on the other hand, the political tensions with Israel obstruct the realization of a subsea pipeline to connect Israel's Leviathan and Tamar gas fields with Turkey and then with the Southern Gas Corridor. These delays, along with the significant gas discoveries in Egypt's Zohr basin that would allow the country to restart its LNG exports, represent a challenge for the development of the Corridor as a multi-source gas network.

Sub-Saharan Africa completes the macro-regional energy picture. Nigeria, and to a lesser extent Angola, currently contribute to Europe's energy security through their oil and LNG supplies¹². More recently, the discovery of hydrocarbon reserves in both Eastern and Western Africa have raised the stakes of energy cooperation with this vast and diverse region. Recent developments in Mozambique, Tanzania, Gabon and Ghana might contribute to further diversify the EU's energy supplies, as well as reduce European dependence on traditional partners. Nevertheless, the export capacity of emerging energy actors is hitherto limited.

¹² Nigeria is the third largest crude oil supplier to the EU after Russia and Norway, and the third LNG supplier after Qatar and Algeria.

The internal and trans-border dimension

The internal-external nexus in energy security: challenges for a 28-state European energy market

Despite the heavy reliance on external supplies, much of the recipe to enhance energy security lies within the EU. The internal resilience of the European energy system, in fact, is a key factor against potential shocks and disruptions on the external supply side. In addition, the creation of a coherent internal energy policy is essential for the EU to engage more constructively with its external partners and to speak with one voice on regional and global energy matters.

In the past, the fragmentation of the EU energy market has facilitated divide-and-rule efforts by supplier countries, with potential negative externalities both on the physical security of energy imports and on the higher costs for those Member States not relying on diversified portfolios of supplies. Incomplete transnational interconnections and reverse flow capacity, the lack of equal and transparent access to infrastructures, and the absence of rules and network codes to effectively manage gas flows and govern cross-border gas market transactions have been key vulnerabilities for European countries vis-à-vis their main energy suppliers.

The situation in the Baltics, Central Europe and Eastern Balkans is a very revealing case, as these countries still largely rely on energy infrastructures built by the Soviet Union during the Cold War. These facilities have not been expanded and diversified after the Soviet collapse for several reasons: the lack of political willingness and financial capacity of Member States; Russia's behaviors - such as the inclusion of 'destination clauses' in commercial contracts and the denial of access to its pipeline network to third-party gas suppliers - aimed at preventing national markets' liberalization and regional integration. In order to address these challenges, the EU has committed itself to a complex and ambitious regulatory process throughout the adoption of three packages of liberalization directives for the electricity and gas sectors. Nevertheless, the lack of implementation of the European rules at the national level still limits the effectiveness of Brussels' action in this domain.

European efforts to strengthen internal resilience: an infrastructure policy to address external challenges

Infrastructure policy is an important factor to reduce the vulnerability of Member States and to strengthen the EU capacity to respond through solidarity mechanisms to external, as well as internal energy shocks. Adequate, integrated and reliable energy networks must rely on a balanced and consistent combination of transport infrastructure and interconnections, LNG terminals and storage facilities.

Since the 2006 Ukraine gas dispute, the EU has made significant progress in the gas storage domain. Storage capacity has risen at a pace of 5% per year until 2012, and at a

pace of 2.5% in the period 2012-14 to reach a total of 101 Bcm at the EU level.¹³ Good results have been achieved also in the strengthening of North-South gas interconnections complementary to the East-West pipeline network established in Soviet times and basically controlled by the Russian supplier. In addition, significant reverse flow capacity has been created and currently allows transporting gas volumes from West to East. Despite these efforts, the physical integration of the markets is far from being completed, and remains insufficient to ensure the security of supply standards set by the EU. In this perspective, the Commission's European Energy Security Strategy, published in 2014 at the peak of the Ukraine crisis, identifies a set of 33 infrastructure projects. These are regarded as essential initiatives to improve the security of supply and more effectively connect energy markets. In order to achieve this goal, every year the Commission dedicates *ad hoc* funds from the Connecting Europe Facility (CEF).

Whilst financial support from the EU plays a key role in the creation of an integrated market, Brussels' action needs the unambiguous commitment of Member States towards transnational cooperation, particularly at the regional level, in order to avoid higher costs, duplications and overall inefficiency. In this perspective, the Commission's decision to elaborate an EU LNG Strategy represents an important opportunity to adopt a common, holistic and coherent approach to the development of LNG capacity in Europe. This is expected to significantly contribute to the diversification of supply and consequently to energy security at the EU level. Such outcome would avoid replicating the Spanish and Baltic experience. The former has generated abundant LNG import capacity that is unable to reach continental markets due to lack of transport infrastructures. The Baltic region has been characterized by uncoordinated national initiatives, which still risks to cause unnecessary and costly overcapacity.

The development of internal interconnections, at the same time, has to be fully aligned and coherent with the realization of EU-sponsored external pipelines and energy infrastructures. The establishment of an energy infrastructure network in South-Eastern Europe, for instance, must be designed in order to receive and distribute gas supplies reaching the region through the Southern Gas Corridor.

An outward-looking development of the European energy regulatory framework

In order to be fully functional, however, even physical integration would not be sufficient. In this respect, regulatory improvements – specifically, the full implementation and enforcement of the Third Internal Energy Market Package's provisions on network unbundling and on independence of regulators - are of critical importance. The Agency for Cooperation of Energy Regulators (ACER) and the European Networks of Transmission System Operators for Electricity and Gas (ENTSO-E/G), both established by

¹³ Total identified projects (at beg. of 2014): 77 bcm (highly competitive market) Under construction: 22 bcm (with a completion date up to 2025):
<http://www.cedigaz.org/documents/2015/Gas%20Storage%20in%20Europe,%20recent.pdf>

the Third Energy Package, are at the cornerstone of the EU attempt to regulate, plan and manage cross-border electricity and gas flows. These assets are designed to encourage the Europeanization of the regulatory activities that are still much fragmented at the national level. In this context, regional cooperation can be instrumental to promote progressive convergence towards the establishment of a single European market design. Initiatives such as the Visegrad countries' V4 Initiative, the Pentalateral Energy Forum (PF), the North Sea Countries Offshore Grid Initiative (NSCOGI), the Baltic Energy Market Interconnection Plan (BEMIP) and the recently established Central East South Europe Gas Connectivity (CESEC) point exactly in this direction.

Along with essential internal consolidation, EU energy security can benefit from the expansion of market rules and regulatory cooperation mechanisms beyond its borders, in order to establish new regional energy architectures and enhance the energy resilience of its key partners. The EU has already put in place initiatives to harmonize and integrate markets of strategic energy partners, but the results achieved so far do not appear fully satisfactory. This is the case, for instance, of the Energy Community, which entered into force in 2006 to expand the EU internal energy market to neighboring countries. The implementation of common energy rules is facing difficulties and delays similar to those experienced at the EU level, and these have been exacerbated by changes of government and contrasting internal attitudes towards European integration, at least in some, of the Community's contracting states. The EU supports also bottom-up regional regulatory cooperation initiatives, such as MEDREG (the Association of Mediterranean Energy Regulators), which aims at implementing a clear, stable and harmonized regulatory energy framework in the Mediterranean and seeks progressive market integration in the Euro-Mediterranean region.

New impetus, in this context, can be provided by the discussed extension of the Energy Union beyond the EU's borders. New regional energy architectures can revive the engagement of neighboring partners such as Turkey, Ukraine, Moldova and the Balkan countries. In addition, regional cooperation in the Mediterranean can be strengthened through action of the three Euro-Med energy platforms on gas, electricity market and renewable energy & efficiency. The integration of Turkey, in this context, should be one of the key objectives for the EU. Turkey, in particular, has the ambition to become the key regional gas hub, but the incomplete liberalization of its energy markets prevents the country from effectively playing this role. In addition, Ankara's projected gas demand risks to transform the country from the cornerstone of the EU diversification strategy to a potential competitor for new gas supplies. For these reasons, overcoming the difficulties encountered in the Accession negotiations on Chapter 35 - Energy, and the failed attempts to engage Turkey in the Energy Community and through the Positive Agenda (the institutional initiative launched by the EU in 2012 to keep the accession process of Turkey alive and put it properly back on track), in order to reach a real coordination and integration with Ankara on energy policies, becomes of utmost importance for the EU's energy security.

The global dimension

Facing increased competition in the international energy arena

Today the EU is the world's largest importer of energy resources. The bloc imports more than 11 million barrels of crude oil daily (mb/d), more than the United States (7.4 mb/d), China (6.8 mb/d), Japan (4.3 mb/d), India (3 mb/d), and Turkey (0.7 mb/d). At the same time, the EU imports 255 billion cubic meters (Bcm) of natural gas per year, which represents more than twice the amount imported by Japan—the World's second largest importer of gas (112 Bcm)—and significantly more than China (50 Bcm), Turkey (46 Bcm), the United States (31 Bcm), and India (20 Bcm).

Despite these figures, global consumption trends suggest that in the next decades the EU will face increasing competition over energy supplies from non-OECD (Organization for Co-operation and Development) countries. According to the International Energy Agency (IEA), the global distribution of energy demand is set to undergo dramatic changes with energy use remaining essentially stable in much of Europe and other industrialized countries. The rise of consumption remains actually concentrated in the rest of Asia (60 percent of the global total), Africa, the Middle East, and Latin America. In this evolving context, the European Union is called to strengthen its ability to speak with one voice concerning global energy affairs. In particular, the EU needs to deal with new energy suppliers and establishing effective dialogue with other global consumers.

In this perspective, the traditional consumer vs. producer relationship in place during the Cold War - with the West/OECD on the side of importers, and OPEC plus Russia on the side of exporters - has been progressively replaced by a complex multipolar trade structure. In the last few years, the rise of Asian demand, driven by China's extraordinary economic growth, has introduced new dynamics in the traditional supply and demand schemes. In the current global energy system, competition among consumers to accede to new resources is becoming a reality, bringing together important political and security developments. The foreign policy of China towards Africa is just one - possibly the most evident - example of the implications of the increased energy competition across the globe. Despite declining/plateauing domestic energy demand, the evolution of the relations between the EU and some of its key energy partners (i.e. Russia) forces Brussels to develop effective tools both to cooperatively engage emerging consumers and establish fruitful energy relations with new potential suppliers.

A strong EU energy diplomacy for a new global energy governance

The complexity of the present global energy system requires a serious revision of the role and nature of the institutions for international cooperation on energy, as well as the reform of the energy governance mechanisms currently in place. The current global energy architecture, in fact, presents a set of structural shortcomings. In particular, it does not include the emerging and developing countries, that are now major energy consumers; it does not establish effective energy cooperation between producing and consuming

countries; it possesses no instruments to cope with the new risks brought about by multipolar energy supply.

The International Energy Agency (IEA) is a major case in point, being an international organization of energy importing countries that does not include main energy consumers such as China and India. For this reason, if nothing changes, its relevance will progressively decrease on the international stage. At the same time, neither China nor India, nor any other international actor, would be able to tackle the challenges of global energy security and climate change alone. The same argument applies to the Energy Charter Treaty, which establishes a multilateral framework for cross-border cooperation in the energy industry, but does not include any of the emerging energy consumers among its members.

At the same time, the fracture that emerged within OPEC at the end of 2014 demonstrates the difficulties experienced by traditional producers in adapting to the changing energy market dynamics. Changes driven by technological innovations, such as hydraulic fracturing and horizontal drilling that have triggered the unconventional revolution in the United States, or in the case of new seismic imaging, which allows hydrocarbon exploration in new very challenging areas, as ultra-deep waters and subsalt formations. The considerable flexibility introduced by the US shale model, in particular, enables producers to rapidly adjust production as demand dictates, with astonishing effects on price volatility, as well as on the stability of fiscal budgets of traditional energy producers.

In this context of insecurity and volatility, new institutional and governance mechanisms become crucial in several ways. In particular, institutionalized arrangements are key to: improve information sharing and reduce competition among both consumers and producers, promote international investment and address the causes of market instability, and, ultimately, pursue climate mitigation and support low carbon development options and energy poverty eradication.

Through an effective energy diplomacy action, the EU could aspire to play a leading role in the definition of a new multilateral energy architecture, and, consequently, to keep a pivotal position in the identification of the strategic priorities and policy guidelines of the global energy sector. Apart from multilateral energy efforts, European diplomatic action can significantly contribute to strengthen bilateral relations with emerging producers in regions such as sub-Saharan Africa, Latin America and Oceania. Resources from these regions, in fact, represent an important opportunity for the EU to promote the diversification of supplies, thus enhancing the bloc's energy security. Furthermore, energy dialogue with the United States deserves special attention, as significant American LNG exports could soon reach the European market and compete with traditional volumes.

The EU as global leader in climate action: between ideology and pragmatic action

The Energy Union Communication presented by the Commission on 25 February 2015 reflect the recognition that an ambitious climate policy is key to ensure secure, sustainable, competitive and affordable energy to the EU consumers. Although in the last years European citizens and industries have paid high economic costs for the EU global leadership in the fight against climate change, Brussels' commitment in this domain remains crucial. This necessity is reinforced by the increased international awareness concerning the fast pace of climate change, and the first actions undertaken at the global level to cope with this issue.

Stronger international moves in the climate change domain present both opportunities and challenges to the EU. On the one hand, the EU and its Member States can exploit their first mover competitive advantages (i.e. in the regulatory, technological and industrial sectors) to foster domestic economic growth and industrial development driven by increasing business opportunities abroad. In this context, the engagement of third countries – particularly developing ones – becomes key to raise their awareness concerning the EU's leadership in renewable and energy efficiency technologies. The EU, in fact, can play a crucial role in promoting sustainability policies and encouraging energy transition through technological and know-how transfer, assistance and capacity building, information and best-practice sharing. In this perspective, addressing EU's traditional energy partners like the North Africa and Middle East countries is a key objective. The promotion of energy transition in these countries - through the introduction of sustainable low-carbon technologies, the reduction of universal energy subsidies and the promotion of better demand-side management practices – could in fact strengthen Europe's energy security by increasing the availability of hydrocarbon resources, which would otherwise be consumed domestically.

On the other hand, greater international awareness on climate change means also increased technological and industrial competition for the EU on the global stage. Whilst the EU is still leader in innovations for sustainable energy and low-carbon technologies, other parts of the world – *in primis* China and the US - are quickly catching up, eroding the substantial gap accumulated by Europe, through previous forward-looking climate policies. The key challenge for the EU is, therefore, to retain its leading role concerning global investment in green energy technologies in order to maintain its industrial edge without negatively affecting the short-term competitiveness of the European economic sector. This, in particular, still suffers from years of economic crisis and slow growth. In this context, a more effective external energy policy would allow the EU to exploit its first mover competitive advantages vis-à-vis possible competitors. Furthermore, Europe could promote cooperation schemes with emerging actors from a leading position, before larger economies of scale and investment capacity would allow other global competitors to challenge Europe's position.