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The Foreign Dimension of EU Energy Policy: The Case of the Southern Gas Corridor

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The EU depends on energy imports for more than half of its primary energy consumption. This long-term trend has necessarily influenced the evolution of the EU's energy policy and its foreign dimension. During the past decade, the coupling of environmental and energy policies has created the conditions for a strong push towards a growing share of renewable sources in the energy mix, reducing the overall need for fossil fuels. At the same time, EU hydrocarbons production is decreasing, thus creating a growing demand for energy imports.

In this context, EU member states have been adopting various strategies to ensure their energy security, ranging from diversifying import routes to strengthening the relationship with historical suppliers. At EU level, only recently has energy policy gained a more consistent foreign dimension, shifting from a purely market-oriented approach to a more geopolitical approach. This change has become particularly evident in the case of the Southern Gas Corridor (SGC), which is intended to bring Central Asian and Middle Eastern natural gas to European markets. The current evolution of the projects along this corridor provides an example of the potentialities and the limits of the foreign dimension of the EU's energy policies.

New goals for climate and energy will represent a further push for renewable sources. However, imported fossil fuels are expected to remain the backbone of EU energy supply, so all national and EU energy policy will necessarily have to deal with this external energy challenge.

The EU energy mix and the dependence on imports

The EU energy mix is based on fossil fuels (IEA 2013a).[1] Oil, gas and coal account for three quarters of the EU's overall energy consumption,

and represent the backbone of the energy mix for every member state. According to the IEA, EU energy demand is approximately 1,650 mtoe, with oil as the single most important element, accounting for one-third of consumption (IEA 2013a).

Oil products completely dominate the mobility market, covering more than 90 per cent of transport sector demand, for passengers as well as freight. In this sector, despite high prices, oil is still the cheapest alternative for final consumers – especially in view of the investments required for switching to other sources, the costs of developing a new distribution system and the lack of a clearly competitive alternative. In other sectors, however, oil is now quite marginal, as a consequence of a progressive replacement began during the 1970s, after the oil crisis (IEA 2008). This one-sector concentration, coupled with constant improvements in energy efficiency and a stagnant car market, has entailed a structural reduction of the oil consumption and a long-term threat to the dominance of oil in the energy mix.

Natural gas has followed a very different pattern. EU consumption has grown steadily over the past three decades, and it now accounts for a quarter of energy demand. Unlike oil, natural gas occupies a pivotal role in the energy system, representing a major source for different uses. Gas is a major source of energy for industrial uses and for heating: moreover, thermoelectric plants powered by natural gas provide one-fifth of all power generated in the EU. In several countries, including Italy, the UK and the Netherlands, natural gas provides nearly half of the power generation. Natural gas supplies are therefore a key element in the stability of the electrical system, where reliability is in turn a strategic issue for every developed economy. Despite the negative consequences of the economic crisis, natural gas-powered plants retain a crucial technological advantage over other traditional sources: they represent the best solution to complement power production from non-stable renewable sources (IEA 2012).

Other major traditional sources in the EU energy mix are coal and nuclear, which account respectively for 17 per cent and 14 per cent of total consumption. Their use is mainly concentrated in the power generation sector: in several major economies these sources provide the cheap base-load for the electrical system (IEA 2013b). However, their relevance outside the power generation sector is limited, and even there they are facing growing challenges. The political pressure in Germany and Italy has resulted in the decline of nuclear energy, while in other member states, like Finland or France, there is still huge interest in developing this type of energy. In the case of coal, the main challenge is mitigation of the emissions consequences.

Renewable sources have been taking a greater share of total EU energy consumption, accounting for approximately 12 per cent of the mix as of 2011.[2] However, the term 'renewable sources' is a comprehensive label which includes quite different technological solutions. Biofuels and biomass account for 8 per cent of the mix: the former are used for transport, the latter mainly for heating. Hydroelectric is a technologically mature source of power generation, extensively used for more than a century in Europe and now accounting for approximately 2 per cent of the total. By contrast, solar photovoltaic and wind are relatively new technologies for power generation. They are rapidly expanding, but currently account for approximately 2 per cent of the EU total.

The importance of fossil fuels in the energy mix is coupled with another structural element: import dependence. Most domestic EU production of oil and gas comes from mature fields in the North Sea and the Dutch onshore, with some minor fields in Romania, Germany and Italy (BP 2013).[3] Some limited reserves are still to be recovered, but the long-term trend is an irreversible decline in existing fields with very low probability of new discoveries.

By contrast, EU production of coal, mainly concentrated in Germany and Poland, is declining due to competition from cheaper international supplies. Despite proven reserves, operational costs and EU labour legislation have reduced the competitiveness of the domestic production, especially outside Poland.

The EU's overall dependence on imported fossil fuels exceeds 70 per cent, reaching nearly 90 per cent in the case of oil. Without reliable and relatively cheap flows of external supplies, economies would be crippled within few months. Even if this vulnerability is an unavoidable consequence of participation in a global economy, from the political perspective there is a clear need to limit the risks involved in fuelling the economy with competitively priced energy (Bahgat 2006; Haghighi 2007).

The level of risk entailed by dependency on external suppliers varies widely, in line with the structure of international supplies: intuitively, a stable and diversified supply network should mitigate risk dramatically (Frappi 2013). Therefore, a further means of improving energy security, besides reducing the demand for imported energy, could be provided by adequate diversification of imported supplies as regards origin and transit routes (EC 2000, p. 3).

In the case of oil and coal the EU countries can enjoy the benefits of global markets with a sufficiently diversified supply. By contrast, the natural gas market is essentially regional, and shaped by the development

of expensive pipelines, making diversification opportunities limited and, above all, expensive. This trade-off between risks, diversification and costs is one of the key features of EU energy policy.

Impact of import dependence on the foreign projection of EU energy policy

The evolution of the EU's energy policies over the past decade has been driven by two different priorities: reduction of the CO_2 emissions, especially through the promotion of renewable energy sources, and the creation of a progressively integrated energy market at EU level. Both trends have impacts on the overall level of energy security and on the external actions of the EU.

The first trend is a consequence of the importance given by the European Commission (EC) to the issue of climate change. The priority accorded to reduction of CO_2 emissions, with renewable sources as a main tool, led to the definition of legally binding targets for 2020, where the share of renewable sources in the EU energy mix must reach 20 per cent by 2020. Renewable sources are to help to reduce gas emissions and to limit the increase of the dependence on energy imports caused by the fall of domestic production of traditional fuels.

However, this positive contribution has structural limitations in the power generation sector. At current technological levels, the pillars of the expansion of renewable sources – solar photovoltaic and wind generation – provide only discontinuous generation. Since electricity storage has no mature technological solutions for large systems, expansion of discontinuous renewable sources entails the risk of destabilization of the electrical system, with the consequent need for backup capacity. Such backup is needed to deal promptly with any discontinuities, and is currently provided mainly by plants fuelled by fossil fuels.

The additional positive contribution of renewable sources to EU energy security is therefore inversely proportional to their penetration: the larger their share, the lower will be the positive contribution of a further increase. Despite a potential stagnation or reduction of the overall market, fossil fuels remain essential, and their supply is based on cooperation between international suppliers and European operators. However, the economic and political context of this relationship is rapidly changing, due to the second trend in energy policies at EU level: the creation of a progressively integrated energy market.

The whole process of European integration started shortly after the end of the Second World War, originally as a project of energy market for coal, but energy progressively lost its centrality in the European project. The creation of a common energy market gained a new momentum during the 1980s, as part of the broader and more ambitious project of a Single European Market, as discussed in Chapter 1 of this book. In particular, the electricity and natural gas markets have become progressively integrated and influenced by EU legislation, which has been dominated by a strong pro-market orientation. As regards security, the creation of a continental market has entailed a larger infrastructural system made up of integrated national networks, which have diversified supplies and are bound together to provide greater resilience.

An important consequence of EU legislation has been the progressive weakening of 'national champions' – national or regional monopolists, partially or completely controlled by national or regional governments. From complete dominance of their traditional markets, these companies have been progressively exposed to competition and mandatory reduction of their domestic-market assets. This process has curtailed the ability of national governments to steer energy policies through the strategies of the most important company on the market. Decision makers have had to rely increasingly on their capacity to regulate the market, exploiting the leeway offered by the EU legislation and the competences enshrined in the various treaties.[4]

At the domestic level, this process led to a substantial re-organization of powers, but the main consequence in terms of capabilities concerned external projection. National champions had provided an effective way to project national priorities at the international level, not least through establishing long-term relations with suppliers and developing the costly transport infrastructure needed to satisfy the increasing demand for energy imports. National foreign policy usually acted in synergy with the strategies of national champions, aiming at the creation of a political context which could promote the stability of the energy supplies. The weakening of national champions deprived EU governments of a major tool, potentially lowering the level of energy security of the member states, even in a situation of growing integration and a common energy market.

The standard response to the challenge that has emerged at the EU level since the 1990s has been to project internal market rules to be followed by transit and producing countries. The question of the projection of EU regulatory power is addressed in Chapters 1 and 2 of this volume, and by many other authors as well (see Egenhofer and Law 2002; Correljé and van der Linde 2006; Lavenex and Schimmelfennig 2009; Umbach 2010).

The first initiative was the creation of the Energy Charter Treaty, signed in 1994 and operative since 1998. In addition to the EU member states, it includes some East European and post-Soviet states. The aim of the treaty is to strengthen the rule of law on energy issues, limiting the freedom of action of national governments and hence mitigating the risks for international private operators associated with energy-related investments and trade. The European Charter Treaty is legally binding, but its actual scope in providing a working legal framework has been limited by the decision of the EU's main suppliers, Russia and Norway, not to ratify the treaty, followed in the case of Russia by the decision to withdraw from the treaty in 2009.

The EC continued its efforts to expand the EU legal framework outside its borders, focusing on regional initiatives such as the Euro-Mediterranean Energy Forum (1997) and the Baltic Sea-Region Energy Cooperation (1998). A few years later, energy issues occupied a central role also in the development of European Neighbourhood Policy (2004) (Prange-Gstöhl 2009), as discussed in Chapter 1 of this book. Overall, those multilateral initiatives provided the main framework for the external projection of energy policies towards the EU's 'near abroad', but with limited impact on the legislation of the EU's partners.

The most important and ambitious initiative came in 2005, with the signing of the Energy Community Treaty. The treaty, which entered into force in 2006, included the EU and several partners in the Balkans.[5] In 2010, Moldova and Ukraine joined in. The treaty is a legally binding commitment, devised to expand the *acquis communautaire* beyond EU borders. It has proven relatively efficient in assisting bordering countries with limited or no energy resources to conform with EU legislation; its relevance for energy security has been severely limited by the absence of major producing countries.

While European countries were dealing with the enlargement and the deepening of the EU internal market, also in the energy domain, the priority appeared to be a universal – or at least regional – diffusion of the market mechanisms and principles, as highlighted in Chapter 1. However, the outcome was seen as inadequate; in particular, the resistance of major producing countries in the former Soviet space and in Northern Africa revealed the limits of the EU's approach.

Institutionally, the answer to those shortfalls was essentially more centralized action at EU level, which could give a political dimension beyond the slow diffusion of the market institutions. This approach was anticipated in the first relevant document devoted to the political perspective of the energy supply, the green paper 'Towards a European Strategy for the Security of Energy Supply', issued by the EC in 2000 (EC 2000). It emphasized the vulnerability of the EU energy system, its increasing import dependence and the need to expand EU energy policy beyond the process of market creation through a more 'geopolitical approach'.

This first tentative document was followed in 2003 by the inclusion of energy issues in the 'EU Security Strategy' (Council of the European Union 2003). A few years later, the 2006 Russia–Ukraine crisis put energy security concerns on the top of the EU agenda (Stern 2006; Pirani et al. 2009). The same year, the EC issued a further green paper, 'A European Strategy for Sustainable, Competitive and Secure Energy', proposing a common external policy on energy, enabling the EU to speak with a 'single voice' (EC 2006a). At the same time, the EU's Eastern enlargement was raising the market share of Russian supplies, due to the high level of dependence still characterizing former Soviet allies or subjects in Eastern Europe, hence increasing the urgency of more immediate action.

EU institutions also started to regard energy policy as a tool for engaging external partners with the aim of creating a 'ring of friends' beyond the EU's borders. This strategy of building bilateral relations started with Russia (2000) and Norway (2002), progressively including 18 countries during the past decade.[6]

To counter risks to external energy supplies, EU institutions concentrated on efforts to promote the Trans-European Energy Networks (TEN-E). Originating in the 1990s, TEN-E provided a political impulse and promoted the European dimension of essentially national projects in line with a 'bottom-up' approach. After revision in 2003, the TEN-E guidelines shifted to a 'top-down' approach, based on the identification at EU level of axes of priority projects, devised as means of strengthening EU – rather than national – markets.[7] This process created a hierarchy among projects, based on their contribution to the common interest, and in particular to the crucial task of tackling the increasing dependence on gas imports. This approach was reinforced by the 2006 revision of the guidelines, which introduced the possibility of appointing a European coordinator for each main project and supported more consistent promotion of the EU dimension of the perspective infrastructures.

Despite its limited impact on the actual development of infrastructures, the EU's external energy policy continued to be articulated through the dual priority of strengthening the dialogue with regional partners and promoting infrastructural diversification. In 2008 two relevant documents were issued: the EC green paper 'Towards a Secure, Sustainable and Competitive European Energy Network' and the 'Second Energy

Strategic Review', reiterating the centrality of diversified and reliable natural gas supplies, especially their increasing complementarity with renewable sources (EC 2008a, 2008b).

However, it was the economic crisis that started in 2008 that created the conditions for concrete and effective EU action through the stimulus package. The European Economic Recovery Plan made available in 2009 an unprecedented amount of money (EUR 3.9 billion) to fund strategic energy infrastructures and attract private investments, followed in 2010 by a second batch (EUR 2.3 billion) (EC 2010). For the first time, the EU's energy sector funding went beyond simple support to feasibility studies, and provided direct co-financing for design and realization phases.

However, market rules and financial constraints prevented the EU institutions from directly financing a relevant share of projects beyond the stimulus package. Their role remained essentially focused on the creation of adequate conditions to attract private investments. The limits of this approach were exposed by the evolution of the Southern Gas Corridor (SGC), the most important diversification project for EU gas markets.

The SGC as a testing ground for the EU's external energy policy

The effort to diversify natural gas imports became a priority as a reaction to the combined effect of rising dependence on imports and increasing political risks in several transit and producing countries, both in the former Soviet Union and in Northern Africa. Since 2010, average EU imports have amounted to approximately 300 billion cubic metres per year (bcm/y), accounting for two-thirds of total consumption. The most important supplier is Russia, which in 2014 exported 116 bcm, equal to 28 per cent of EU consumption. Next comes Norway, which exported 89 bcm, equal to 22 per cent. In other words, half of the EU's consumption of natural gas is provided by just two international suppliers. With Algeria and Libya representing another 31 bcm, 86 per cent of the EU's imports of natural gas come from only three main supply channels.[8]

The creation of a fourth channel that could help to diversify suppliers as well as transit routes became a top EU energy security priority. The 'Second Strategic Energy Review' developed the idea of an SGC, introduced originally as a new possible priority axis in 2003 (natural gas route 3 – NG3). Here the concept of 'corridor' is a political one, used to describe any infrastructural development that could bring to EU markets natural gas from Caspian and Middle Eastern sources without the necessity of transit through Russian territory.

Market rules and financial constraints have prevented EU institutions from directly financing a large share of any project. They have, however, exerted strong pressure to accelerate regulatory approval within EU member states and shown a commitment to improve political relations with non-EU countries involved in the projects. However, the scope and the outcomes of the action of the European institutions have been severely limited by structural factors.

The regional context of the SGC proved particularly complex. First of all, Middle Eastern resources were less accessible than had been assumed in EC documents: instability in Iraq dissuaded international companies from investing in its gas sector, and the hostile relationship between the Washington and Teheran any progress in getting Iran involved. Importantly, the isolation of Iran prevented access to the largest gas reserves in the region (32 Tcm), second in the world only to those of Russia (46 Tcm) (EIA 2013a, 2014b). However, Iranian gas reserves could be available for large-scale export only in a medium-term perspective (10 years), due to the need of reforming energy legislation in the country before attracting direct investments in the sector.

Other Middle Eastern reserves proved too small or too far from EU final markets to offer a viable contribution to the SGC, especially in view of investment costs and price competitiveness on final markets.

The other pool of reserves which could feed the pipelines along the SGC was located in the Caspian Basin. That region was more stable than Middle East, but its potential was partially offset by geographical features. Landlocked and with no direct access to European markets, the post-Soviet republics bordering the Caspian had inherited a transport system fully centred on the Russian pipeline network. Any and every export route bypassing Russian territory would have to be built from scratch. Nonetheless, the potential was huge: Azerbaijan held noteworthy reserves (1 Tcm), but the bulk of the producing capacity in the region was located in Turkmenistan, with reserves of 7.2 Tcm (EIA 2013b; 2014a), later revised to 17.5 Tcm (BP 2014).

Moreover, accessing Azerbaijani reserves was relatively easy: lying on the western shores of the Caspian Sea, the country could be connected to EU markets through Georgia and Turkey. By contrast, Turkmen gas had to cross the Caspian before reaching Azerbaijan and then follow the same path towards Europe. Technically, this was a relatively simple matter, but legal and political hurdles due to the lack of agreement on the legal status of the area served to block any major subsea infrastructure, making access in practice unfeasible (Carletti 2014). Only multilateral negotiations between littoral states (Russia, Kazakhstan,

Turkmenistan, Iran and Azerbaijan) would be able to lead to the realization of the Trans-Caspian Pipeline (TCP) system between the Turkmen and Azerbaijani shores, but the situation has remained stalemated since the early 1990s.

A further major issue prevented Turkmen natural gas from reaching European markets. The Turkmen government imposed on its international partners regulations on the purchase of its natural gas at the border, excluding Turkmen involvement in transport infrastructures outside its borders while also limiting the involvement of foreign companies in upstream operations. This meant a particularly high risk level for international companies seeking involvement, reducing Western operators' interest in the country. However, those regulations have not prevented Chinese involvement in gas projects in Turkmenistan, and a pipeline connecting Turkmen gas fields with the Chinese market was built in 2009.

EC action then focused on overcoming those main weaknesses and promoting the participation of Turkmenistan in the SGC. Indeed, only with access to Turkmen reserves could the project achieve an annual capacity large enough – at least 50 bcm/y (10 per cent of the total consumption) – to contribute to any real diversification of EU imports. In 2011 the EC received a mandate to negotiate a legally binding treaty between the EU, Azerbaijan and Turkmenistan to build the TCP system (EC 2011). Despite such unprecedented power and several visits by high-ranking officials, the EC failed to achieve relevant results in its negotiations. In particular, it could not broker a workable solution to the legal stalemate on the status of the Caspian because it lacked the means and the regional relevance to put pressure on all the littoral states, especially Russia. Without this fundamental step, other negotiations could not achieve major results.

Beyond the issue of the legal status, the EC failed to create the political conditions to satisfy both the Turkmen government and Western operators. It lacked the financial means and the mandate to provide direct financing for infrastructure and thereby reduce the vulnerability of private operators. The EC's role was primarily limited to the legal framework; indeed, the main proposal focused on the creation of a block purchasing mechanism for Caspian gas – the Caspian Development Corporation (CDC) (IHS CERA 2010) – directly backed by the EC and aimed at aggregating main European operators and offering them a framework for negotiating access to the Turkmen upstream. The EC sought to use European operators to achieve external policies, but lacked the leverage previously available to national governments with their 'national champions'. The EC's attempts failed to attract either company commitment or the cooperation of the Turkmen government.

At the same time, Ashgabat was intensifying its cooperation with Beijing – which, unlike the Western competitors, was ready to assume a long-term commitment and to bear a large share of the production and transport risks associated with the project (Chow and Hendrix 2010). Unable to sideline Chinese competition or to force Turkmen government and European companies to find an agreement, the EC focused its efforts on the only available partner: Azerbaijan.

Since independence, the Azerbaijani government had played an active role in the development of the country's energy potential. The major result had been the commissioning in 2006 of two coupled pipelines, exporting oil and natural gas from the Azerbaijani offshore in the Caspian to Turkey, through the Georgian capital, Tbilisi. The oil pipeline started in Baku and reached open waters in the Mediterranean port of Ceyhan. The gas pipeline exported Caspian gas to the Turkish market, up to the entry point of Erzurum.

Azerbaijani oil production had been levelling off; since the early 2010s the government began to aim at enhancing and diversifying its exports by increasing its domestic natural gas production. The flagship project was the second phase of the Shah Deniz project and offshore field in the Caspian, which could provide 16 bcm/y for international markets. Shah Deniz was developed by a consortium of international companies and operated by the British major BP. The Azerbaijani state company Socar held only a minority stake (16.7 per cent) in the project, acting as an equity partner, with BP owing 28.8 per cent, Statoil 15.5 per cent, and Total, Lukoil, Nico of Iran and TP of Turkey having 10 per cent share each. The Azerbaijani government and international companies shared a strong commercial interest in exploiting the field and bringing the gas to the highly profitable EU market.

Plans for expanding the existing pipeline system in the Southern Caucasus and the project of a new pipeline to transport Azerbaijani natural gas through Turkey up to its border with the EU were strongly backed by the Azerbaijani government through its national champion, Socar. The EC supported the project, which was the only viable opportunity of realizing an infrastructure along the SGC during the current decade. Moreover, Azerbaijani gas represented the sole possibility of keeping alive the Nabucco project.

Nabucco was a pipeline project conceived around the turn of the millennium and exactly matching the requirements of the SGC. The idea was to bring gas coming from an unspecified eastern source to the Austrian network, transiting through Turkey and the Balkans. Since 2005 Nabucco received special attention from the EC and could be considered the flagship project for the SGC.

Although the EU officially supported all pipeline projects that might run through the SGC, Nabucco was given de facto political priority, initially due to its planned transport capacity of 30 bcm/y, upgradeable. Exploiting the possibility provided by the 2006 TEN-E guidelines, the EC expressed its intention to assign a coordinator to only one gas project: Nabucco (EC 2006b). In 2007, the former Dutch Foreign Minister Jozias van Aartsen was appointed coordinator for Nabucco, highlighting the rising centrality of the project in the external actions of the EC. Furthermore, Nabucco was entitled to the maximum contribution available under the Economic Recovery Plan, EUR 200 million.

Despite strong political support, in 2013 the Nabucco project was abandoned, and the Shah Deniz consortium opted for the Trans-Anatolian Pipeline (TANAP)–Trans-Adriatic Pipeline (TAP)[9] system (Rzayeva 2014). TANAP was a project running from the Georgian–Turkish border to the Turkish–Greek border – with Socar as majority shareholder. This indirect involvement of the Azerbaijani government reduced the costs of financing the investments and the risks deriving from a potential cost overrun, far more than any potential support that the EC could give to Nabucco.

The choice of TANAP in 2011 had forced the EC-sponsored Nabucco to propose a second, shortened version of the pipeline: Nabucco West. This new version had to compete with other commercial pipelines, TAP in particular, for the connection between Turkish border and the main European markets. Eventually, in 2013, TAP was chosen due to its cost advantage, which again was no match for the political support of the EC.[10] After this last failure, Nabucco consortium was de facto disbanded, while the actual realization of the SGC was completely disentangled from the original plans and actions of the EC.

The whole evolution of the SGC clearly reveals the limits of the external dimension of the EU's energy policy. Since the mid-1990s, EU energy policy has been based on a strongly market-oriented approach which dismantled national monopolies. As a result, privately owned companies compete to provide customers with gas and electricity, while national governments are involved in regulating the markets, under heavy constraints deriving from EU legislation.

This model proved to be efficient and adequate for providing cheap and reliable energy to the EU customers. In dealing with the external dimension, EU institutions – the EC in particular – sought to promote the external projection of internal market structures and principles. However, if future EU membership was not a credible perspective, this approach had limited success. In general, producer countries preferred to retain their autonomy and avoid heavy influence of EU legislation on their energy policies.

In those cases the EU institutions favoured a more political approach, trying to intervene directly in the market and steer investment decisions about international supplies. Here the EC adopted an approach resembling the one followed by national governments during the previous decade, but without two key tools. The first was control of a significant share of a 'national champion' that could couple market and political priorities directly in its strategy. The second essential tool available to national governments was – and still partially is – being able to establish bilateral relation with a foreign government. This capability is based on the simultaneous and effective control of several key policy areas, and the possibility of devising and promoting a common interest within the given political unit: two features that the EC – and the EU more generally – clearly lacks.

The shift from the promotion of market structures and principles to a (geo)political approach led to ineffective actions on the part of the EC, as highlighted in the case of SGC, which had been a top EU energy security priority. EC efforts to push for a certain industrial solution and to attract suppliers other than Azerbaijan failed, whereas initiatives promoted either by private companies on a commercial basis or by the national government of a producing country eventually prevailed.

The EC's action was also undermined by the choice of backing a controversial project with uneven impacts. By transiting through the Balkans and arriving in Austria, Nabucco would benefit those countries while penalizing Italy and Greece. Uneven impact seems unavoidable in almost any project, but the EC was unable to provide compensation for the disadvantaged countries, which therefore acted to protect their own interests. In general, while the uneven impact of market processes draws its legitimacy from free competition principles, the uneven impact of a political initiative is more difficult to justify and to impose (Stoppino 2001).

EU energy needs in the next 20 years, and international challenges

The outcome of the EC's involvement in the SGC must inevitably force the EU to rethink the management of the external dimension of its energy policy. The main achievement of this policy to date has been the progressive creation of an integrated energy market at EU level. As long as the action of the EC could remain focused on this internal dimension, the outcomes have been impressive and very positive, also because they draw their legitimacy from a shared vision of a competitive and efficient market, progressively freed from political intervention.

When the EC's action shifted to the external dimension, claiming a (geo)political role for the EU, its intervention proved quite ineffective – as seen in the case of the SGC – despite the consistent and growing attention paid by EU institutions in their official communications, as shown in Chapter 1 of this book. Abandoning a neutral approach based on pure competition required economic means, political will and legitimacy which the EC did not have – moreover, given the current institutional structure and power distribution within the EU, any future intervention is likely to bring similar results.

However, this does not seem to represent a major problem for EU energy security, notwithstanding widespread demands for a more assertive external energy policy at EU level, as noted in Chapter 1. Natural gas is expected to increase its share in the energy mix, but overall energy consumption is expected to stagnate, while EU gas imports are set to increase slowly, from the current level of 275 bcm to 405 bcm by 2030.[11] As the import level in 2010 was 348 bcm, any expansion of import capacity during the current decade will increase diversification rather than filling a capacity gap. Furthermore, if we consider that new infrastructure projects that came online between 2010 and 2013 provide a combined capacity above 80 bcm/y, new import capacity will be essentially relevant for diversification also in the next decade.[12]

All in all, the need for a further increase in import capacity is less urgent than it seemed a decade ago. Also the need for a political approach to the external dimension of the EU's energy policy now appears less pressing. As shown in past decades, the highest potential impact of the EC action is likely to concern the processes of creating an EU internal market, integrating national markets and improving interconnections between national grids. A renewed focus on the market-building process could well have a greater impact on EU energy security than the realization of projects that are to add new import capacity.

The future level of energy security in the EU will also be influenced by the new environmental targets for 2030 – which, according to the EC proposal, could be a 40 per cent reduction of CO_2 emissions compared to 1990 and a share of renewable sources of 27 per cent at EU level (EC 2014). The impact on the EU energy system is likely to be moderately positive, since the increasing penetration of renewable sources will limit European dependence on imports, thereby reducing the level of gas emissions (Capros et al. 2014).

Independently of 2030 targets, EU economies will remain structurally dependent on imports of fossil fuels in future decades. Since energy trade is primarily a business relation, the most important priority for ensuring a reliable flow of energy supplies is the ability to pay for imports.

A healthy and growing economy is a particularly effective way of ensuring adequate investments and fostering good cooperation with energy suppliers. Possibly, the most important contribution to the EU's energy security will not come from its energy policies.

For the economy to thrive, it needs access to reliable, sustainable and reasonably priced energy. Various factors, including price volatility or the growing gap in energy prices between Europe and the USA, may undermine the economic recovery and make the EU's economy less competitive in the global context. The EU needs a comprehensive approach to energy policy in order to deal with these uncertainties and risks. In addition, the current situation, with the crisis in Ukraine still unfolding and the normative gap between Russia and the EU growing, may compel the EU as a whole and some of its member-state governments to adopt measures that will open a new chapter in energy relations with Russia.[13] This in turn may force the EU to rethink its long-term energy strategy and look for new partners and sources of energy.

Notes

1 Figures refer to 2011. Unless otherwise stated, the source for all energy statistics figures is IEA (2013a). Even if those figures are not the most updated available, IEA is the most authoritative source; moreover, they ensure a methodological consistency with the forecasts proposed in the last part of this work.

2 According to Eurostat (nrg_ind_335a), the share of renewable sources in the EU energy mix was 13 per cent in 2011, and 14 per cent in 2012. The difference with EIA's figure is caused by some methodological issues.

3 See BP (2013) *Statistical Review of World Energy 2013*. This trend is unlikely to be reversed by unconventional gas production, which is not expected to reproduce the scale of the US shale gas revolution. See Maugeri (2013).

4 According to the Treaty on the Functioning of the European Union, the measures adopted by the Union 'shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply' (Art. 194).

5 In the Balkans, Energy Community Treaty includes Albania, Bosnia, Montenegro, FYR of Macedonia, Serbia and Kosovo. Until their accession to the EU, also Bulgaria, Croatia and Romania were members of the Treaty, while now they are participants, according to their status of EU member states.

6 The EC also staged several multilateral initiatives: the Baku initiative, launched in 2004 and involving Ukraine, Moldova, Turkey, Azerbaijan, Armenia, Georgia, Belarus, Kazakhstan, Tajikistan, Turkmenistan, Kirghizstan, Uzbekistan – for more details on this initiative see http://ec.europa.eu/dgs/energy_transport/international/regional/caspian/energy_en.htm. For more on the Black Sea Synergy, launched in 2007 and involving Ukraine, Moldova, Turkey, Azerbaijan, Armenia, Georgia, Russia, see Japaridze (2011). For more on the Central Asia Partnership, launched in 2007 and involving Kazakhstan, Tajikistan, Turkmenistan, Kyrgyzstan, Uzbekistan, see General Secretariat of the Council (2009).

7 TEN-E guidelines were introduced by the Decision No. 1229/2003/EC.
8 Provisional figures, elaboration based on Eurostat (2015a, 2015b) and JODI (2015).
9 TAP is a project running from the Greek–Turkish border to the Italian shores, controlled by majority made up by the shareholders of the Shah Deniz consortium. The Interconnector Turkey–Greece–Italy, an alternative to TAP bringing gas from Greece to Italy, was instead discarded in 2012.
10 'TAP offered the consortium a transit tariff of three euros ($3.85) per 100 kilometers of pipeline – 50 cents cheaper than for Nabucco-West over the same distance. Plus, TAP is 459 kilometers shorter than Nabucco-West, which makes for even cheaper total tariffs. The investment amount needed to build the TAP pipeline is also far lower – an estimated 4.4 billion euros ($5.64 billion) compared with 6.6 billion euros ($8.47 billion) for Nabucco-West.' See Abbasov (2013).
11 Actual figures are from JODI (2015), while forecasted figures are from IEA (2014). Figures are referred to the reference scenario (New Policies) and it is based on the Annex A – Tables for Scenario Projections. Forecasted quantities are intrinsically tentative and approximate since the energy sector is traditionally subject to dramatic changes. However, those figures are particularly relevant since they express current common expectations, which in turn drive actual investment decisions.
12 New import capacity commissioned between 2010 and 2013 includes Nord Stream (55 bcm/y), Medgaz (8 bcm/y) and new LNG regasification capacity (20 bcm/y). It is also important to consider that nearly 70 per cent of the European import capacity of LNG is sitting idle: see Groupe International des Importateurs de Gaz Naturel Liquéfié (2015) *The LNG Industry in 2014*.
13 The question of the EU's energy relations with Russia is discussed thoroughly in many works published recently (Aalto 2007, 2012; Kuzemko et al. 2012; Godzimirski 2013; Kuzemko 2014) and is addressed in the post-Ukraine crisis context in Chapter 4 in this volume.

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Part II

Troublemakers and Competitors