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**Research Report**

## Designing a new EU-Turkey strategic gas partnership

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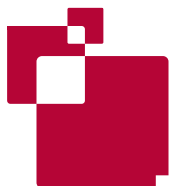
# DESIGNING A NEW EU-TURKEY STRATEGIC GAS PARTNERSHIP

SIMONE TAGLIAPIETRA AND GEORG ZACHMANN

## Highlights

- The European Commission's February 2015 Energy Union Communication calls for intensified work on the Southern Gas Corridor (SGC) and the establishment of a new strategic energy partnership with Turkey. The presence of the European Union and Turkey in the region is complementary in a number of ways. Building on this could unlock the region's gas export potential and make gas supplies to the EU and Turkey more secure.
- The EU should establish dedicated energy diplomacy taskforces with Turkey and each potential supplier in the region (Azerbaijan, Turkmenistan, Iran, Kurdistan Region of Iraq). This would allow the EU and Turkey to make use of their complementary diplomatic leverages to overcome barriers to regional gas trade.
- In parallel, the EU should establish with Turkey a dedicated financing mechanism to facilitate gas infrastructure investments, with a primary focus on the upgrade of the Turkish gas grid. The European Investment Bank might play a role in attracting private and institutional investors through its financing tools.
- The four 'EU-Turkey Energy Diplomacy Taskforces' and the 'EU-Turkey Gas Infrastructure Financing Initiative' would be initiatives of the recently started EU-Turkey Strategic High Level Energy Dialogue.

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# DESIGNING A NEW EU-TURKEY STRATEGIC GAS PARTNERSHIP

SIMONE TAGLIAPIETRA AND GEORG ZACHMANN, JULY 2015

**THE 2014 UKRAINE CRISIS** brought energy security concerns back onto the European Union's agenda when policymakers realised that the threat of supply disruptions from the EU's main natural gas supplier, Russia<sup>1</sup>, reduced their political room for manoeuvre. In the debate on EU energy security, Poland's then-prime minister Donald Tusk coined the term 'Energy Union' to highlight that only a European solution could sensibly resolve the systemic energy supply threat to various member states (Tusk, 2014). This discussion was quickly broadened into a debate about EU energy and climate policy generally. The wide-ranging Energy Union concept was then taken up by the new European Commission under Jean-Claude Juncker, which made the creation of an Energy Union one of its flagship projects when it took office in November 2014. Juncker created the post of Commission Vice-President for Energy Union. The Energy Union Communication published in February 2015 was one of the first strategic documents of the new Commission (European Commission, 2015a).

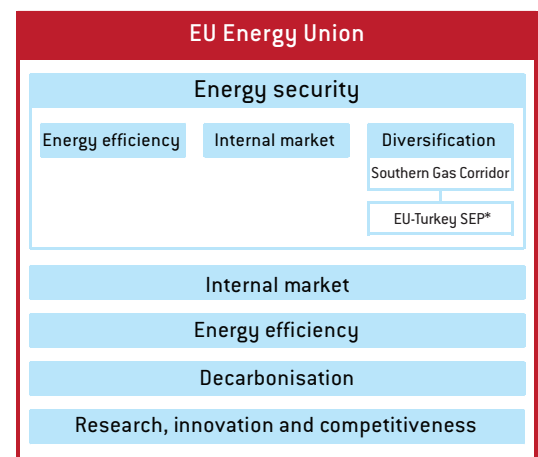
The Energy Union Communication has five inter-linked parts: energy security, solidarity and trust; a fully integrated European energy market; energy efficiency contributing to moderation of demand; decarbonisation of the economy; and research, innovation and competitiveness. Given the origins of the document it is no surprise that energy security is mentioned first. Energy security should be safeguarded by reducing energy consumption, strengthening the internal exchange of energy and diversifying energy supplies. While reducing consumption and improving energy markets relate to the second and third parts of the Energy Union (internal market and energy efficiency), diversification measures are seen as the core of energy security.

In the debate on diversification of imports, the focus has been on natural gas because it can only

be imported through expensive infrastructure and has been at the origin of several security-of-supply crises in the past decade. Natural gas is at the centre of the current supply-security concerns arising from the Ukraine-Russia conflict. To diversify the sources of Europe's natural gas imports, the Commission wants to stimulate the construction of new infrastructure and address the issue of higher liquefied natural gas (LNG) prices. As far as natural gas pipelines are concerned, the Commission seeks the reinforcement of the Southern Gas Corridor (SGC) initiative, which was launched in 2008 (European Commission, 2008) as a response to the EU's energy security concerns emerged after the first Russian-Ukrainian-European natural gas crisis<sup>2</sup>: *"To ensure the diversification in gas supplies, work on the SGC must be intensified to enable Central Asian countries to export their natural gas to Europe"* (Figure 1). Given the pivotal role of Turkey in the corridor, the Commission calls for the establishment of a strategic energy partnership with Turkey<sup>3</sup>.

In this Policy Contribution, we discuss what the EU and Turkey can realistically expect from the strategic gas partnership, and make recommendations

Figure 1: The Southern Gas Corridor's place in the EU Energy Union framework



Source: Bruegel. Note: \* Strategic Energy Partnership.

1. And the most important non-EU transit country, Ukraine.
2. In January 2006, after a long-lasting disagreement on natural gas prices, Russia cut off supplies to Ukraine for three days, Ukraine diverted volumes destined to Europe and as a consequence natural gas supply to some central European countries fell briefly. A second crisis occurred in 2009, when the transit of Russian gas through Ukraine was completely halted for two weeks, resulting in a severe crisis in several central and eastern European countries. For a detailed discussion of these two crises see Stern (2006) and Pirani, Stern and Yafimava (2009).
3. *"The EU will use all its foreign policy instruments to establish strategic energy partnerships with increasingly important producing and transit countries ... such as ... Turkey."*

that should enable the mutual benefits to be maximised. We mainly focus on the SGC, but also assess the potential impact on the EU-Turkey gas partnership of the recently announced Turkish Stream project.

We do this with two caveats. First, neither the overall EU natural-gas diversification strategy nor the SGC should be seen as an attempt to completely replace Russian natural gas supplies to Europe. This would be difficult, considering the existing volumes and the long-term contracts. The Commission's strategy is rather to ensure that no source, supplier or route has an excessive share of the EU natural gas supply architecture, and to enhance competition in those markets (south-east Europe) that are more exposed to Russian supply predominance.

Second, a diversification option such as the SGC will most likely be more costly than Russian natural gas supplies via the existing infrastructure. However, considering that energy security has a value, the EU should be ready to pay this price as insurance against disruptions of supply from a major supplier. This rationale also applies to the micro level of EU natural gas companies. In fact, companies are willing to pay premiums to have

well-diversified portfolios. This trend is illustrated by the already variegated composition of EU companies' portfolios, which generally include two key suppliers and a series of minor suppliers<sup>4</sup>.

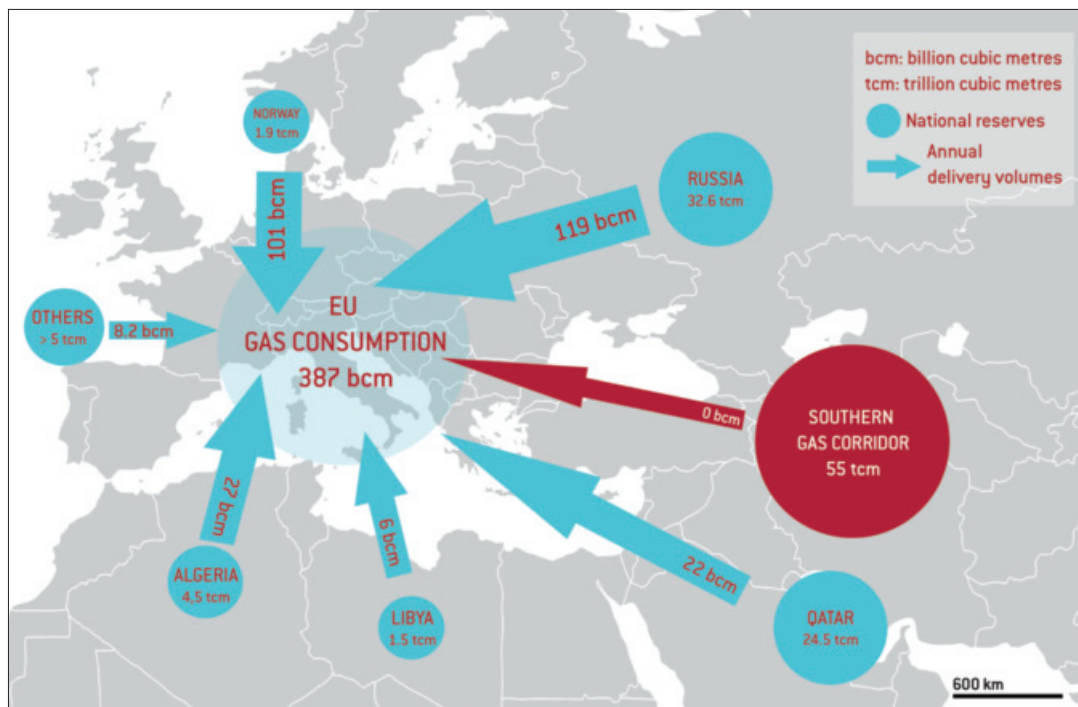
#### THE DEVELOPMENT OF THE EU-TURKEY ENERGY RELATIONSHIP: A CRITICAL ASSESSMENT

Because of its strategic geographical location at the crossroads of gas-rich countries in the Caspian, Middle East, Eastern Mediterranean and Europe, Turkey has progressively emerged over the last decade as a potentially game-changing player in the future EU natural gas security-of-supply architecture.

In particular, since the launch of the SGC initiative in 2008 the Commission has stressed the potential role of Turkey as key transit country for European gas imports (Tagliapietra, 2014b).

The SGC has become a key component of the EU energy security strategy because it would contribute to the reduction of the perceived EU over-dependence on Russian natural gas supplies by allowing new supplies from the Caspian and Middle Eastern regions to reach Europe, and would meet the objective of creating more competition

Figure 2: The Southern Gas Corridor's contribution to EU security of supply for natural gas



Source: Bruegel based on BP Statistical Review of World Energy, June 2015.

4. For instance, Engie's largest supplier, Norway, supplies 26 percent of its portfolio, Russia supplies 27 percent of E.ON Ruhrgas AG's portfolio, Algeria supplies 31 percent of Gas Natural Fenosa's portfolio, Russia supplies 32 percent of Eni's portfolio.

5. The Commission part-funded a feasibility study.
6. Natural gas from Azerbaijan would have reached the Turkish border via the South Caucasus Pipeline; from Turkmenistan it would have come via Iran or the planned Trans-Caspian Pipeline; from Iraq it would have come via the planned extension to the Arab Gas Pipeline.
7. For the EU, Nabucco was a major opportunity to diversify its natural gas supplies. For Turkey, it represented an opportunity to realise its long-term strategic objective of becoming a key energy hub. For the US, it represented a major geopolitical asset to reduce EU dependence on Russia for natural gas, exactly as the Baku-Tbilisi-Ceyhan pipeline in the 1990s reduced EU dependence on Russia for oil.
8. OMV of Austria, MOL Group of Hungary, Bulgargaz of Bulgaria, Transgaz of Romania and BOTAS of Turkey. RWE joined the consortium in 2008.
9. Because of the investments already made in its Shah Deniz natural gas field, and because of the need to make a final investment decision for Shah Deniz Phase II [which was concluded on 17 December 2013].
10. The intergovernmental agreement signed by the five transit countries in 2009 provided a legal framework for 50 years, confirming that 50 percent of the pipeline's capacity was to be reserved for the shareholders of the project and the remaining 50 percent was to be offered to third-party shippers on the basis of a regulatory transit regime under EU law.

on southern and eastern European natural gas markets.

### The rise and fall of Nabucco

The focus on the SGC translated into EU political and financial support for Nabucco<sup>5</sup>, the proposed 3,800 kilometre pipeline with a capacity of 31 billion cubic metres per year (bcm/y), intended to carry natural gas from Azerbaijan, Turkmenistan, Iraq and Iran to south-east and central Europe via Turkey<sup>6</sup>.

Thanks to the political backing from the EU, Turkey and the United States<sup>7</sup>, the Nabucco project gradually advanced from the signing in 2005 of the joint venture agreement between the five companies initially involved<sup>8</sup>, to the signing in 2011 of the project support agreements between the Nabucco consortium and each of the five transit countries (Austria, Hungary, Romania, Bulgaria and Turkey) (Novinite, 2011).

However, notwithstanding the strong commitment of the five transit countries and the unprecedented support of the EU and the US, the Nabucco project ultimately failed for a variety of commercial and financial reasons, such as a weak outlook for EU natural gas demand, uncertain deliverability of supplies, potential competition from the Russian South Stream pipeline that was supposed to bring gas from Russia through the Black Sea to Bulgaria, and lack of guarantees or long-term ship-or-pay contracts that would facilitate access to bank loans (Hafner, 2012).

The failure of Nabucco had significant implications not only for the evolution of the SGC but also for the evolution of the overall EU-Turkey energy relationship.

### The Southern Gas Corridor after Nabucco

The difficulties encountered by the Nabucco project paved the way for the emergence of a new version of the SGC, promoted by the only available regional supplier: Azerbaijan<sup>9</sup>. In 2011 Azerbaijan signed a memorandum of understanding with Turkey on the Trans-Anatolian Pipeline (TANAP), a project very different to Nabucco in terms of initial capacity (16 bcm/y) and especially in terms of

legal structure. Nabucco, being a project completely under EU law, was subject to rules such as third-party access and unbundling throughout its entire length<sup>10</sup>. By contrast, considering that Turkey has not yet adopted the EU energy acquis in its legislation, Azerbaijan – with a major stake in the TANAP project – will in practice control the pipeline and all natural gas transit through it. Considering both Turkey's reluctance to enter the EU Energy Community<sup>11</sup> and the difficulties related to the opening of the energy chapter of Turkey's EU accession process, this situation is also unlikely to change in the foreseeable future.

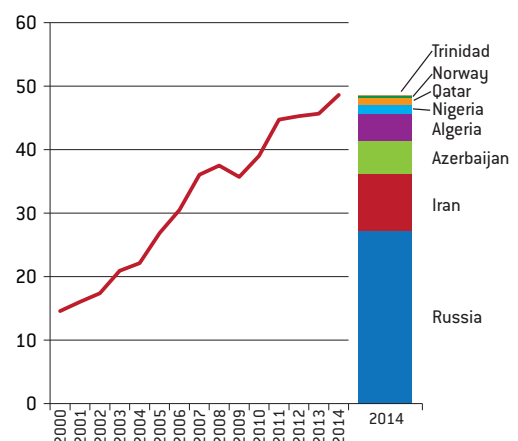
### The EU-Turkey energy relationship after Nabucco

The Nabucco odyssey and the emergence of TANAP highlighted a difference in the way the EU and Turkey perceived the SGC and their energy relationship more broadly.

After years of cooperation with the EU on Nabucco, Turkey decided to change its approach and turn to Azerbaijan to speed-up the development of the SGC via TANAP. There were two key reasons for this. First, as noted in Turkey's energy strategy, "*the primary aim of Turkey is to realise its own energy security*"<sup>12</sup>. Considering its rapidly growing demand for natural gas and its over-reliance on Russian supplies (Figure 3), natural gas diversification is a key energy policy priority for Turkey.

Second, the choice was driven by Turkey's genuine discontent with the EU about the continuous

Figure 3: Turkey's natural gas demand, 2000-14, and import portfolio 2014 (bcm)



Source: Bruegel based on BP Statistical Review of World Energy, June 2015.

procrastination in the accession negotiations in general and the EU's vagueness about the opening of the energy chapter in particular<sup>13</sup>.

### Implications of the current impasse

Since the failure of Nabucco, the EU-Turkey energy relationship has lost momentum. This situation is in the strategic interests of neither the EU nor Turkey. A coherent and actively coordinated approach to the SGC would have allowed the two players to pursue their respective interests in a more effective way.

In fact, a joint EU-Turkey diplomatic effort directed at the natural-gas producing countries in the region might have considerably enhanced the possibility of translating the availability of regional natural gas resources into deliverable supplies. In particular, a coherent approach to the development of regional infrastructure might have allowed the political and commercial barriers that have traditionally undermined the regional natural gas potential to be overcome.

Establishing a strategic energy partnership with Turkey would be a move in the right direction. The opportunity should be fully seized and managed in a way that will avoid the mistakes of the past.

A solid EU-Turkey strategic energy partnership should be founded on a realistic assessment of the regional potential to deliver natural gas supplies. In the past, too much emphasis has been placed on the regional availability of resources, without always taking into account that in natural gas markets, availability of resources does not automatically imply that they can be delivered.

For this reason, in the next section we provide an overview of the regional natural gas producing countries, to better clarify the future potential for exports to the EU and Turkey. For each country, we also describe how the EU and Turkey might work together for the best outcomes.

### THE SOUTHERN GAS CORRIDOR: REGIONAL PRODUCERS

#### Azerbaijan: the SGC front-runner

If there is a certainty about the SGC, it is Azerbaijan, with 1.2 trillion cubic metres (tcm) of natural gas reserves<sup>14</sup>. Azerbaijan has since 2007 supplied the Turkish market with about 5 bcm/y via the South Caucasus Pipeline (Rzayeva, 2014).

With the ongoing development of the second phase of the offshore Shah Deniz field, Azerbaijan

11. The reason for Turkey's reluctance is clearly described by Barysch (2007, p.6): "Turkey says that there are technical problems with some of the Energy Community Treaty's provisions. But more fundamentally, it does not like the idea of unilaterally signing up to a big chunk of the acquis without being able to ask anything in return. Turkish officials say that such an arrangement may suit countries that are not eligible for membership. But Turkey is already an EU candidate and it does not want to be fobbed off with what it sees as a 'privileged partnership' in the energy field".

12. Republic of Turkey Ministry of Foreign Affairs, *Turkey's Energy Strategy*, available online.

13. For a detailed discussion, see Korany and Sartori (2013).

14. If not otherwise stated, all energy statistics in this paper are from BP (2015).

Figure 4: The Southern Gas Corridor, gas reserves and pipeline projects



Source: Bruegel based on BP Statistical Review of World Energy, June 2015.

will export additional 6 bcm/y to Turkey by 2018/19 and also 10 bcm/y to Europe by 2020. On the basis of a final investment decision reached in December 2013 (BP, 2013b), the new 16 bcm/y will flow to Turkey through an expanded version of the South Caucasus Pipeline and TANAP, the construction of which started in March 2015 (Euractiv, 2015). The 10 bcm/y destined for European markets will then pass through the Trans-Adriatic Pipeline (TAP), which will connect TANAP and Italy via Greece and Albania. Sale agreements have already been signed with companies operating in Italy (for a total of 8 bcm/y), Greece and Bulgaria (for the remaining 2 bcm/y) (BP, 2013a).

After 2025, more natural gas might become available on the basis of the development of further phases of Shah Deniz (Interfax Global Energy, 2014) and also on the basis of the development of new fields.

Because of the well-established energy partnership between Azerbaijan and Turkey, and also considering the infrastructure already in place and that now under construction, the role of Azerbaijan in the SGC can be considered secure. In fact, the TANAP-TAP pipeline-tandem represents a good example of a win-win solution for all the players involved.

In order to strengthen the current, positive, cooperation approach and to secure future additional developments, the EU should engage with Turkey, Azerbaijan and Georgia in a structured platform of dialogue to coordinate regional natural gas trade issues. This would build on cooperation so far and offer new cooperation opportunities.

#### Turkmenistan: just looking eastwards?

Turkmenistan's position as a potential natural-gas supplier is rapidly evolving. The estimate of the country's natural gas reserves skyrocketed from about 2 tcm in 2007 to 17.5 tcm in 2015. This huge difference underlines the profound under-exploration of the country's natural gas resources, and sheds light on the potential for further discoveries.

Since the late 1990s, the US has actively promoted the construction of the Trans-Caspian

Pipeline (TCP) to deliver Turkmenistan's natural gas to Turkey and eventually to Europe (Socor, 2006, p.27). This idea was rekindled in 2006, when the EU sought to diversify its natural-gas supply in the aftermath of the first Russian-Ukrainian-European natural gas crisis. However, the EU's efforts to promote this pipeline project have failed because of the complex geopolitical situation of the region. In particular, the major barrier to the development of the TCP is the international dispute over the legal status of the Caspian Sea. Russia and Iran have traditionally claimed the Caspian to be a lake in legal terms in order to apply customary international law concerning border lakes, instead of the United Nations Convention on the Law of the Sea (Janusz, 2005). If the Caspian is regarded as a lake, Russia and Iran could prevent the development of the TCP.

Taking into account this situation, Turkmenistan looked eastwards and agreed a major natural gas partnership with China that culminated in the construction of the 30 bcm/y Turkmenistan-China Pipeline (via Uzbekistan and Kazakhstan), inaugurated in 2009. This outcome marked a successful strategic policy initiative on the part of the Chinese government, which in a timely way concluded agreements with Turkmenistan to construct the pipeline and to consistently involve Chinese companies in upstream production. This special relationship is set to further deepen in the near future, with the expansion of this pipeline to a capacity of 65 bcm/y by 2020 (Pirani, 2012).

Considering its huge, untapped, natural gas reserves, Turkmenistan could well supply both China and Europe in the future. However, the prospect of Turkmenistan exporting natural gas to the EU via Turkey will continue to depend on the resolution of the legal dispute over the status of the Caspian Sea and on the clarification of environmental concerns relating to the TCP project<sup>15</sup>.

In the aftermath of the 2014 Ukraine crisis, the European Commission reinvigorated its diplomatic efforts towards Turkmenistan. This effort culminated on 1 May 2015 with the adoption of the Ashgabat Declaration between Turkmenistan, Azerbaijan, Turkey and the EU. The parties declared their commitment to cooperate on legal, commercial, technical and other issues related to

15. On this issue, the EU and the World Bank have financed a study that will be published by end of 2015.

natural gas supply from Turkmenistan to Europe. Georgia will also be included at working-group level because of its role as a key transit country (European Commission, 2015c).

It is too early to tell whether this renewed cooperation will be successful. However, this inclusive cooperation scheme represents an example of good practice that might also be applied by the EU to the other potential suppliers of the SGC.

### Iran: the main prize

With its 34 tcm of natural gas reserves, the largest in the world according to BP, Iran is generally considered the main prize for the international gas trade. Notwithstanding this rich natural endowment, the country has not yet translated potential into reality and, paradoxically, even continues to have problems in meeting its own domestic natural gas demand (Tagliapietra, 2014a).

There are two main reasons for the under-exploitation of Iran's natural gas resources: the international sanctions regime and the country's legal framework in relation to petroleum.

The international sanctions imposed on Iran by the US, the United Nations (UN) and the EU in relation to the country's uranium enrichment programme considerably delayed Iran's energy development plans. In particular, the unilateral sanctions applied to the country's energy sector by the US and the EU since 2007 have completely halted the activities of international energy companies in Iran (Reuters, 2015).

Iran's legal framework, meanwhile, has deterred international energy companies from investing. Iran's constitution has provisions restricting foreign involvement in the country's energy resources. To implement these, international energy companies are obliged to develop oil or gas fields with their own capital and then hand them over to the National Iranian Oil Company (NIOC) once production starts and wait to be reimbursed by NIOC<sup>16</sup>. These terms are highly unattractive for international energy companies.

However, there have been developments since the 2013 election of the moderate Hassan Rouhani as

president of Iran. In April 2015, after several rounds of negotiations, Iran, the P5+1 (UN Security Council permanent members the US, UK, Russia, France and China plus Germany) and the EU agreed a framework nuclear deal that, if finalised (ideally by the end of June 2015), could immediately lead to the lifting of energy sanctions (Einhorn, 2015). This would completely reshape Iran's energy sector, as international energy companies line up to take advantage of the huge, untapped, opportunities offered by the country's oil and gas sector (Financial Times, 2015a).

Iran's legal framework is also due for revision. Iran's oil minister Bijan Namdar Zanganeh said in 2013 he would reform the current framework, bringing it closer to the model adopted in Iraq, which could be more attractive for foreign investors (The Economist, 2013). This reform will most likely take place only once a final nuclear deal is agreed.

Considering these potential major changes, the EU should cooperate with Turkey to keep open the possibility for future natural gas flows from Iran. The prospects of natural gas exports from Iran to the EU will mainly rely (because of geography) on the Turkish-Iranian natural gas partnership. Considering the current difficult relationship between these two partners (currently under international arbitration over high prices for Iranian gas (Azernews, 2015)), the EU should play the role of moderator and propose the consolidation of Iranian natural gas exports to Turkey and the opening-up an export route to the EU via an upgraded Turkish grid. A coordinated effort by the EU and Turkey might succeed in persuading Iran that it should not exclusively orient its future natural gas export strategy eastwards (eg the Iran-Pakistan-India pipeline) or focus on LNG, which might go to Asia rather than Turkey (Tagliapietra, 2014a; Jalilvand, 2013).

### Kurdistan Region of Iraq: a new player

The Kurdistan Region of Iraq (KRI) has emerged over the last few years as a potential new supplier to the SGC. With an estimated range of 3-6 tcm of natural gas resources (Kurdistan Regional Government, 2013), the KRI might be able to both satisfy its domestic natural gas demand and to

16. Reimbursement of capital expenditure, operational expenditure and an agreed remuneration fee.



export volumes to Turkey and Europe.

Turkey plays an important role in this area, geopolitically and commercially. Turkey and the Kurdistan Regional Government in Erbil signed a natural-gas sales agreement in 2013 for the export of 4 bcm/y by 2017, 10 bcm/y by 2020 and 20 bcm/y thereafter (Reuters, 2013).

Building on this agreement, the Anglo-Turkish company Genel Energy plc reached in November 2014 an agreement with the Kurdistan Regional Government for the development of two natural gas fields, Miran and Bina Bawi, which Genel Energy expects to deliver gross mean sales of about 240 bcm of gas (Genel Energy, 2015).

Considering the potential resource endowment of the region, natural gas exports from the KRI to Europe via Turkey might also well materialise in the medium term, after the KRI reaches natural gas self-sufficiency and after the Kurdistan Regional Government fulfils its obligations to Turkey. However, such a development will depend on internal regulatory stability and regional geopolitics.

A major barrier to the development of the KRI's energy resources has been the tensions between Erbil and Baghdad over the distribution of oil revenues. In December 2014 the two parties finalised a deal to ease these tensions (Financial Times, 2014), which might ultimately pave the way for a new Iraqi federal hydrocarbon law, which would enhance foreign investors' confidence in the country (Korani, 2014).

Of course, the unpredictable evolution of regional geopolitics and the security situation in Iraq will ultimately determine the pace of this development.

Because of the crucial role of Turkey in the KRI, the EU should cooperate with Turkey, the Kurdistan Regional Government and the Iraqi federal government in Baghdad to secure future exports of natural gas to Europe. This cooperation would not only be beneficial to the EU, but also to Turkey, because although Turkey has diplomatic leverage in Erbil, it does not in Baghdad, where the EU is instead a well-established interlocutor.

## A POTENTIAL WAY FORWARD FOR THE SOUTHERN GAS CORRIDOR

Our review of the SGC's potential suppliers has shown both the complexity of the regional natural-gas dynamics and the substantial benefits that could arise if the EU and Turkey work together. We argue that the EU's and Turkey's political leverage in the region is to a great extent complementary. One indicator of this is that while the EU provides significant bilateral official development assistance to Iran, Iraq and Georgia, Turkey is more engaged in this sense in Azerbaijan and Turkmenistan (Figure 5).

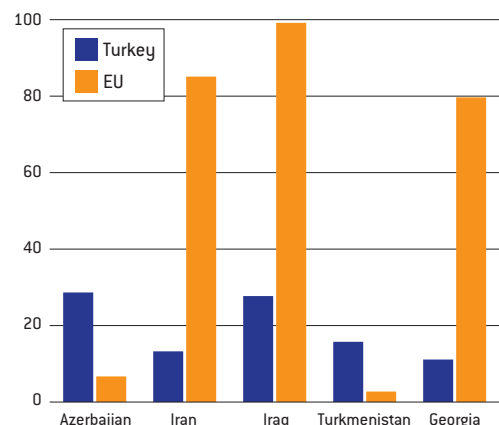
Assessing future export potential via the SGC to Europe is a highly speculative exercise. The 10 bcm/y by 2020 from Azerbaijan is the only certain input. Beyond that, estimates depend on the evolution of the regional geopolitical situation.

In order to provide an idea of the potential orders of magnitude, we assume an average scenario in which each prospective supplier will contribute with a volume corresponding to the start-up volume of Azerbaijan (10 bcm/y) by 2025-30.

In this scenario, the SGC might ultimately be expanded to 50 bcm/y, which would be a significant volume entering EU natural gas markets, especially southern and eastern European markets.

But how can the EU proactively secure this transition? On the basis of our analysis, we make two key recommendations.

Figure 5: Bilateral Official Development Assistance (2013), \$ millions, current prices



Source: Bruegel based on OECD.

### EU-Turkey energy diplomacy taskforces

The EU should establish dedicated energy-diplomacy taskforces with Turkey and each supplier. This would allow the EU and Turkey to fully make use of their complementary diplomatic leverage in the region, and thus have the greatest chance of overcoming the obstacles to the regional natural gas trade. The recent EU-Turkey coordinated approach to Turkmenistan represents a first step in the right direction, but this cooperation should turn into a permanent platform for dialogue between the high-level representatives of all the parties involved.

The four taskforces (EU-Turkey-Azerbaijan; EU-Turkey-Turkmenistan; EU-Turkey-Iran; EU-Turkey-Kurdistan) should be the key pillars of a new EU-Turkey strategic energy partnership. These taskforces might be implemented within the common framework of the EU-Turkey Strategic High Level Energy Dialogue that was started in March 2015 by Commission Vice-President for Energy Union Maros Šefcovic and Turkish Minister for Energy and Natural Resources Taner Yildiz (European Commission, 2015b).

### Financing for infrastructure development

To truly engage Turkey in a new strategic energy partnership, common solutions should also be found to infrastructure shortcomings. After the Nabucco experience, cooperation in the field should first focus on small projects rather than large ones. A starting point could be the infra-

structure to accommodate new Iranian and Kurdistan supplies to Turkey and the EU. These potential volumes might be channelled to the Turkish-European border via the Turkish natural gas grid. This would require an upgrade to the existing network, which Turkey will need to do in any case, considering its growing natural gas demand.

Another focus of cooperation could be the future expansion of TANAP in order to accommodate additional volumes from Azerbaijan and new volumes from Turkmenistan to Turkey and the EU. These volumes might reach the Turkish-European border via an extension of TANAP, which is designed to be expandable to accommodate volumes of up to 60 bcm/y.

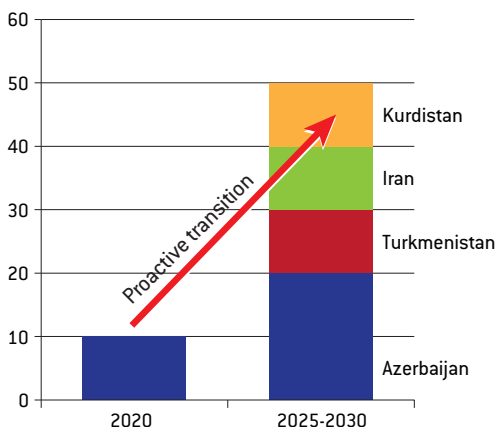
Considering the common strategic interest in having a reliable natural gas infrastructure, the EU might team-up with Turkey to establish dedicated financial mechanisms that will stimulate these investments. In particular, alongside its already well established activity in the Turkey (European Investment Bank, 2014), the European Investment Bank (EIB) might provide a wide set of financing tools to attract private or institutional investors. These tools could include i) guarantees and securitisation; ii) equity and fund investments; iii) project loans.

### A new approach to the SGC

The aim of the EU-Turkey joint effort should not be to provide new major supply alternatives for Turkish and European natural gas markets in the short term. This would be unfeasible, as an expansion of the SGC will realistically not take place before 2025-30.

The aim should rather be to lay the foundations for the expansion of the SGC in the medium term. A partnership that is tested through cooperation on relatively limited gas volumes with up to four different supply sources will do much for Europe's long-term security of supply. It will enable Europe to quickly increase import capacity from those sources depending on their evolution – we cannot foresee the political situation five or ten years ahead in any of the source countries. And investing today in a set of future options to increase

Figure 6: A scenario for the Southern Gas Corridor (bcm)



Source: Bruegel.

Europe's imports from four different sources can be done without having to commit to importing gas that is currently not (and might never be) needed.

After all, current demand is back to the level of the mid-1990s (Eurogas, 2014; BP, 2014), European companies are committed to purchasing more than 125 bcm of Russian natural gas in 2020 and around 70 bcm in 2030 (Dickel *et al*, 2014, p.4), and domestic production is expected to continue to decline during the 2020s. Taking these factors into account, it seems likely that it will only be post-2025 (if at all) that there could be significant demand from European natural gas markets for new supplies via the SGC.

In the shorter term, reinforced EU-Turkey cooperation over the SGC could also be important considering the new geopolitical landscape of the region, with Russia proposing a major energy cooperation project to Turkey: Turkish Stream.

#### TURKISH STREAM: THE NEW REALITY?

On 1 December 2014, Russian president Vladimir Putin surprised the energy world by announcing, during a state visit to Turkey, the demise of South Stream and a new project to supply Turkish and south-eastern European markets from 2019 while completely bypassing Ukraine: Turkish Stream.

Turkish Stream would be a 63 bcm/y pipeline, running 660 km across the Black Sea, from the

Russkaya compressing station to the north west of Turkey, and then continuing 250 km across Turkish territory to the Turkey/Greece border (Gazprom, 2015).

Turkish Stream could be advanced quickly by capitalising on work already done on South Stream. Massive investment has already been made in the 'Russian Southern Corridor' (Gazprom, 2012). With South Stream pipes already delivered to Varna port in preparation for laying, and with pipe-laying ships already present in the Black Sea, the additional cost for Gazprom to build Turkish Stream is limited.

On 7 May 2015, Gazprom CEO Alexi Miller said during a visit to Ankara that Russia and Turkey would start to trade natural gas via Turkish Stream in December 2016 (Financial Times, 2015b). This could lead to the 14 bcm of Russian natural gas currently contracted to be delivered via the Trans-Balkan pipeline to Turkey (via Ukraine, Moldova, Romania and Bulgaria) being completely re-channelled via Turkish Stream.

The development of Turkish Stream, via which Russia intends to supply all the gas it currently supplies via Ukraine, will mainly depend on the ability of Gazprom to renegotiate its contracts with European companies (changing delivery points and, in turn, prices), and the development of new infrastructure to deliver the natural gas from the Turkish/Greek border to destination markets.

Of course, both these issues will have a high political profile, considering that the EU will most likely take a negative position on the project, in order to keep alternative diversification options open and to not undermine Ukraine by helping Russia bypass its pipeline system.

#### The impact of Turkish Stream on the EU-Turkey energy relationship

Turkish Stream will be a pipeline wanted, financed, constructed and operated by Russia for its own strategic interest. Turkey's role will be minor.

Therefore, from an EU perspective, Turkish Stream will be more about the EU-Russia energy relationship than the EU-Turkey energy relationship.

Figure 7: Turkish Stream



Source: Bruegel based on Gazprom.

In contrast to the SGC, which offers the EU and Turkey broad scope for cooperation in terms of energy diplomacy in the region and infrastructure financing, Turkish Stream seems to offer no potential cooperation avenues for the two players.

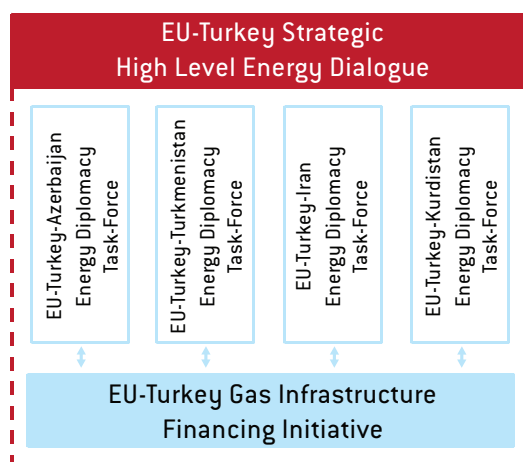
## CONCLUSIONS

Our analysis has shown that, taking into account the new regional energy and geopolitical realities, cooperation on the SGC should represent the basis of a new EU-Turkey strategic energy partnership. Turkish Stream, meanwhile, would rather be a potential source of political disagreement between the EU and Turkey.

Considering the momentum in Europe for natural gas supply diversification in the aftermath of the 2014 Ukraine crisis, the EU should rapidly establish a new SGC cooperation platform with Turkey, on the basis of a new, inclusive, approach that will respond to the strategic interests of both players. The aim should be the creation of favourable conditions to allow energy companies to plan new commercially viable projects in the region.

Cooperation on the SGC could be beneficial for the EU, Turkey and each potential supplier in the region. For the EU it would allow the implementation of a long-pursued diversification strategy characterised by flexibility and scalability over time. For Turkey, it would represent an opportunity to improve its own gas-supply security, by scaling-up imports from regional suppliers and unlocking new sources. In addition, by bundling supplies from up to six sources (the four SGC sources plus

Figure 8: A new EU-Turkey Strategic Energy Partnership: a potential institutional structure



Source: Bruegel.

Russia and potentially the Eastern Mediterranean), Turkey could develop a larger strategic role in the energy politics of the region, which could pay commercial and political dividends. For each potential supplier in the region, the SGC would allow the diversification of their respective natural-gas export portfolios and would increase their revenues from natural-gas exports.

For the EU and Turkey, it is also important to underline that a new joint initiative focused on the SGC would also be about rebuilding mutual trust and geopolitical cooperation between the two players. A joint diplomatic and financial effort to achieve common goals in the region might ultimately have a positive impact on the overall EU-Turkey relationship, at a time when Turkey seems to have lost its European momentum and appears to look increasingly eastwards.

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