

Roadmap towards an Energy Union for Europe

Non-paper addressing the EU's energy dependency challenges

- By 2035, the EU's reliance on imported oil is projected to increase to over 90% (from around 80% today), and its dependency on gas imports is expected to rise to over 80% (from around 60%).¹ Europe's high dependency on foreign energy sources, combined with the recent developments at its Eastern border, has raised the question of the EU energy policy response more valid than ever. On 20-21 March 2014, the European Council discussed the issue of EU energy security. It concluded that "efforts to reduce Europe's high gas energy dependency rates should be intensified, especially for the most dependent Member States." The Commission was asked to present a comprehensive plan for the reduction of EU energy dependency by June 2014.
- This is a challenging task not only for the Commission but for all Member States. The EU is confronted with trade-offs as individual Member States have historically had different attitudes towards the three policy objectives of ensuring EU energy is secure, competitive and sustainable. Energy policy is characterized by the combination of diverse national situations and preferences on the one hand, and potential large economies of scale that could benefit the European economy and its people on the other.²
- Progress made since the 2006 and 2009 energy supply crises in creating a common energy market and implement mechanisms that would ensure the security of supply has been insufficient. The EU remains vulnerable to political pressure due to its high dependency on oil and gas imports. Its room for manoeuvre vis-à-vis Russia is limited, and its efforts in the current crisis have been less effective as a result. The same holds true for the Energy Community countries:³ the EU's energy security is closely linked with the situation in our neighbourhood. That is why the extraordinary European Council held on 6 March 2014 emphasised the EU's readiness "to assist Ukraine in securing its energy supply through further diversification, enhanced energy efficiency and effective interconnections with the European Union."
- Central and Eastern European (CEE) countries are particularly exposed to risks stemming from the current crisis. Despite the substantial expenditure on energy infrastructure in CEE – especially following the 2009 crisis⁴ – CEE's dependency on gas imports from Russia remains

¹ COM(2014) 15 final.

² Energy: Choices for Europe by Lars-Hendrik Röller, Juan Delgado and Hans W. Friederiszick, Bruegel, 2007

³ Apart from the EU these are: Ukraine, Moldova, Serbia, Montenegro, Macedonia, Bosnia and Herzegovina, Albania, Kosovo.

⁴ Only in Poland in last 6 years the investments in gas infrastructure exceeded 2 billion euro (i.a. LNG Terminal, development of internal grids, interconnectors with Germany and Czech Republic, physical reverse flow on Jamal, new underground storage capacities).

at the highest level in the EU, varying between 60% and 100% in some Member States. At the same time, more than 80% of gas imports to CEE transit through Ukraine on average.⁵ This increases the energy security challenge facing the CEE region and the EU as a whole. Additionally, LTC Russian gas prices for CEE remain on average 10-15% higher than for German and other Western European customers which proves insufficient levels of gas-to-gas competition in CEE.

- Tackling all these challenges requires an ambitious and comprehensive master plan for EU energy security. It is vital that the Commission in cooperation with Member States⁶ addresses all the identified challenges and makes the most of the potential of each Member State and the EU as a whole. Key elements of the plan should include: infrastructure development and modernization in order to support diversification; law enforcement; enhancement of EU security of supply mechanisms; increase of EU and Member States' bargaining power vis-à-vis external suppliers; focus on European energy production; and increasing energy security in the EU's neighbourhood.
- The key mechanism for supporting the security of energy supply security should be a well-functioning market. Optimal levels of competition, liquidity, and low market concentration should provide effective solutions in the event of disruptions. What currently prevents the creation of such a market is the segmentation of national markets, the underdevelopment of trading mechanisms and the basic issue of the lack of the infrastructure necessary to allow real market integration.
- A prerequisite for overcoming dysfunctions in the European energy market is the effective and consistent implementation of EU energy and competition law for all market players, including those from third countries.
 - Any undertaking abusing its dominant position on the internal market should be addressed with most effective and long-term remedies, which should address the structural root cause of the dysfunctions. On the gas market such remedies could include: a obligation to sell gas on affected regional energy markets in an auction system; an obligation to switch gas delivery points to the external border of the EU or the Energy Community; an obligation to sell shares in gas infrastructure and other assets in order to prevent abuse of dominant position on the market.
 - Before exemptions or derogations are granted under the 3rd energy package to relevant undertakings, a restrictive examination – especially as regards fulfilment of all the conditions set in Directive 2009/73/EC – should be undertaken. Any exemption under the 3rd energy package should be considered as a regulatory

⁵ IAE data on gas trade flows in Europe in 2013 indicates that flows in March 2013 via UA equaled ~ 210 mcm/day and share of UA transit in imports in CEE was as follows: 100% for AT, BG, HR, HU, RO, SK, SL; 70% for EL; 40-50% for CZ, PL, IT.

mechanism of EU support only for those infrastructure projects that significantly contribute to the diversification of suppliers, sources and routes and unquestionably enhance competition on the energy market (not only in the Member State concerned but in other countries as well).

- Specific unbundling rules in some of the EU regions though envisaged to increase competitiveness on the energy market, in fact decreased its security and allowed for fragmentation to occur in national grids making them vulnerable to the abuse of competition rules. A review of the efficiency of the unbundling rules in the EU (especially with regards to the ITO model) should be thus undertaken.
-
- Integration of the energy markets at one or more regional levels should be supported as a vital step towards creating an EU-wide integrated energy market, with V4 as an example. Work on regional markets integration should go hand-in-hand with infrastructure development in order to provide greater incentives for infrastructure investments and for the optimal use of infrastructure once it is built.
 - This non-paper proposes a set of measures that address the EU's energy dependency challenges. Its implementation could lead to the creation of a genuine "Energy Union" in Europe. All the measures and instruments should be introduced based on the Treaties with full respect for the current balance of competencies between the EU institutions and Member States and the sovereign right of Member States to determine their own energy mix. The Lisbon Treaty has created legal basis for EU energy policy with full respect to the Member States' right to exploit and choose their own energy sources and structure their own energy supply. We have already undertaken actions to ensure: the creation of a functioning common energy market; the security of energy supply in the EU; the promotion of energy efficiency; the development of new and renewable energy sources; the promotion of the interconnection of energy networks; and the strengthening of the external dimension of EU energy policy. Now is the time for the EU to accelerate its activity and fully exploit its current treaty competences in order to build an "Energy Union":

1st pillar. Infrastructure.

Removing energy islands and bottlenecks from the infrastructure map of Europe remains an urgent challenge. Gas and oil imports dependency remains an unaddressed challenge for the EU. The EU needs to accelerate the building and financing of PCI to address its high dependency on gas and oil imports and increase the interconnectivity of the internal market (including interconnections with Energy Community countries) by:

- Giving priority to infrastructural projects in regions that are most vulnerable to a high risk of disruption of external supplies (CEE countries) to be financed by the CEF 2014-20 instrument. They should be accorded priority in project evaluations, and the allocated financial support should be raised to 75% for projects that contribute to the diversification and integration of the EU gas market.
- Re-discussing the needs of oil sector in order to decrease oil dependency and address lack of diversification capabilities of the EU refining sector. The EU needs to find a way for including oil sector in its financial support policies i.a. via support for oil infrastructure and storage capacities and developing new technologies for refining sector to mitigate the dependency from single supply sources.
- Increasing the quota allocated to energy projects in the 2014-20 financial framework through frontloading, full use of flexibility mechanism and re-allocation of unused commitments for key diversification projects and gas storage facilities. When the PCI (Projects of Common Interest) list is updated in 2015, more emphasis should be placed on the development of gas and oil storage facilities, as these directly increase the security of supply.
- Preparing the architecture of financing and streamlining the PEI (Projects of Energy Community Interest) in the framework of the Energy Community. Effective implementation of a EU gas market *acquis* and financial support for infrastructure development would reduce political risk for EU investors involved in Energy Community infrastructure projects.
- Increasing the pace of implementation of PCI projects at all levels: promoters, Member States, European Commission, regulators and ACER. Throughout the process, the implementation of the TEN-E regulation should be monitored and assessed. Additionally, swift revision of PCI list should be undertaken in the near future.

2nd pillar. Solidarity mechanisms.

Faced with a crisis situation, the EU should make use of its aggregated power. That should include developing preventive planning and emergency responses to potential supply disruption scenarios. In the event of a crisis, no Member State should be left alone.

- Regional security of supply plans based on regional risk assessments (e.g. in the V4 region) under the SoS regulation should be supported.
- The SoS Regulation should be revised in order to enable the development of EU-level response mechanisms for crisis situations: *EU risk assessment, EU preventive plan, EU emergency plan*. The system should be built upon: crisis and management capacities of the European Commission; optimised use of existing and planned infrastructure, including gas storage facilities; full advantage of the specificities and potential of each Member State's energy system. Combined, these elements should allow for the creation of a system that would ensure a flexible and fast reaction to any events that could result in supply disruption.
- An option to introduce an EU-wide support system for efficient use of existing and planned storage capacities should be examined along the revision of the SoS regulation. It would not only increase the resilience of the European Union to gas shortages, cold spells and supply disruptions, but also lower the costs of gas storage EU – wide.
- Before the revision of the SoS Regulation takes place, the Commission would be invited to prepare an *EU Risk Assessment*, taking into account new geopolitical risks which could lead to disruption of gas transit through Ukraine.

3rd pillar. Strengthen the bargaining power of Member States and the EU vis-à-vis external suppliers.

Member States should reinforce their position during negotiations with third countries by acting under the "umbrella" of the EU and making use of the internal market and economy of scale benefits.

- In principle, the ultimate goal should be to create conditions in which supply contracts shall be based solely on commercial and economic factors, rather than driven by political determinants. Political determinants have adverse effects on the development of the internal energy market leading to the segmentation of national markets and, in consequence, considerably diminishing the bargaining power of individual Member States. That is why the role of Intergovernmental Agreements (IGAs) should be gradually limited to only necessary considerations and a sufficient level of transparency should be provided. This can be ensured by the:
 - Revision of the EU's IGA Decision (994/2012/EU) so as to elaborate a common EU approach to energy IGAs that should include preparation of a template

consisting of: 1) a list of abusive clauses which lead to inefficiency and to the segmentation of the European gas market, and which shall no longer be included in IGAs or related commercial agreements such as oil indexation, destination clauses, take-or-pay clauses, delivery points located inside the EU-15 instead of the borders of the EU-28/EEA/Energy Community area, etc.; 2) a list of compulsory provisions that should become a part of every IGA in order to ensure that future activities of the parties and respective undertakings will not hamper directly or indirectly the consistent application of EU law.

- The revision of the EU's IGA Decision should also ensure the direct legal support of Member States by the Commission during intergovernmental energy negotiations not limited to giving an opinion on the final draft of the agreement. Compulsory participation of the Commission in IGA negotiations as an observer, as well as both ex-ante and ex-post evaluation of the negotiated agreements, should be required to minimize possibility of an IGA's non-conformity with EU law.
- The creation of a demand aggregation mechanism for external gas supplies at the EU or at the regional level could be an efficient tool to optimize the bargaining position of the major wholesale gas recipients on the EU market and could form an effective remedy to the segmentation of national markets and inequality in terms of gas pricing among the Member States. This could take the form of a collective purchasing mechanism and the Commission should be invited to analyze its potential structure and impacts on the development of the functioning internal gas market and ensuring security of supplies. Since there are several models of collective purchasing mechanisms, further work should be done to examine the best market-based options applicable for the EU regions and suppliers concerned. Such a mechanism could be made operational in the two following ways:
 - Top-down approach. A dedicated agency responsible for the aggregation of the demand of all interested companies could be established, inspired by the existing Euratom Supply Agency. This could lead to the efficient streamlining of demand for new gas supplies from external upstream suppliers via regional exchanges/platforms, thereby allowing market forces to play a greater role in price formation and leading to increased economy-of-scale benefits. The second potential role of such an agency would be the maintenance of strategic gas stocks at the EU level which could serve as a mechanism decreasing the vulnerability to supply disruptions and minimizing the price-speculation effect in case of a gas crisis.
 - Bottom-up approach. This would entail the establishment of a purely commercial entity, responsible for the management of the supply-and-demand aggregation. This body could take the form of a voluntary consortium of interested companies and could operate on a supply/demand matching platform if sufficient interest for such aggregated gas supplies were provided

(e.g. in CEE region). This model requires the establishment of the platform, possibly in the form of a gas exchange, whose role would be to match anonymous demand and supply bids and offers.

- Furthermore, collective purchasing mechanisms could be introduced as a result of antitrust procedures in the field of energy i.e. with companies that have abused their dominant position required to sell gas in auctions organized by regional gas exchanges or through purchasing platforms (i.e. through energy-commodity exchanges).

4th pillar. Development of indigenous energy sources in the EU.

In 2012, the EU's oil and gas import bill amounted to more than €400 billion or approximately 3.1% of the Union's GDP⁷. The development of utilization of indigenous resources should be treated as an investment in the EU energy market that will stimulate the economy. It could shift the European capital flows from external suppliers to the European energy producers. Hydrocarbons help to address energy dependency challenges in a cost-effective way. In this context, coal should be rehabilitated in the EU as contributing to the energy independence.

- No energy source that might contribute to the EU's energy security should be discriminated against. Conventional fossil fuels should be acknowledged as a vital element of EU energy security. Coal is an example of an energy source that can be extracted locally and at the same time is broadly available on a flexible global market. In the foreseeable future, coal will remain a significant part of the energy mix of Member States (some Member States have even increased imports of coal in the last years) as well as of the main global economies (e.g. US and China). Investments in the environmentally friendly and efficient use of conventional energy sources such as coal can bring significant GHG emissions reductions and contribute to EU climate-policy without hampering energy security or the competitive position of the EU *vis-à-vis* its main trading partners. Therefore, the most efficient of the conventional fossil fuels technologies should be promoted e.g. through fuel-specific benchmarking. A quota could also be created for power plants using fossil fuels extracted locally or identified as key for energy security (e.g. those providing 15% of installed power in a given Member State). In addition to that a newly adopted EEAG⁸ as well as EED⁹ provisions should serve as a good basis for policy measures ensuring generation adequacy from fossil fuels based on highly-efficient thermal units, including CHP. At the same time clean-coal technologies should be developed with the EU support (e.g. from the EU Research and Development budget).

⁷ COM(2014) 15 final.

⁸ http://ec.europa.eu/competition/sectors/energy/eeag_en.pdf

⁹ Directive 2012/27/EU

- The EU should also support those Member States which decided to exploit their unconventional gas and oil resources by: emphasizing the fundamental importance of unconventional resources for the EU's security of supply and competitiveness; confirming that current EU legislation is adequate and sufficient for the safe exploitation of unconventional resources so there is no need for new legislative proposals in this respect; stressing that drafting specific national regulations on environmental and investment conditions (i.a. for the extraction of shale gas) lies within the competence of Member States; supporting the integration of shale gas infrastructure with the gas networks of Member States; supporting the development of environmentally safe unconventional hydrocarbon technologies, sharing best practices and raising public awareness (e.g. under HORIZON 2020).
- Promotion of the development of RES (in particular those contributing to grid stability such as biomass) and energy efficiency as an important support element of energy security.

5th pillar. Diversification of energy supply to the EU - gas and oil in particular.

The better the energy infrastructure in the EU and the more integrated the EU energy market, the easier it will be to attract alternative external suppliers.

- Energy infrastructure development and EU market integration will attract alternative external energy suppliers. We should therefore strive to enhance EU cooperation with current alternative external suppliers and invite new ones for oil and gas deliveries.
- The global LNG market is of particular potential in this regard, especially since the shale revolution in North America opened access to significant shale gas and tight oil reserves. At the same time, the growing interest of the North American gas sector to invest in gas-export infrastructure, namely LNG, will soon allow for a significant increase of LNG shipments. We should therefore enhance cooperation with Canada and call for opening US gas exports to the EU. This would be beneficial both to the EU's gas consumers and to US gas exporters which would gain access to Europe's integrating gas market. US oil exports to the EU should also contribute to the increase of energy security, and should be streamlined in the EU-US bilateral dialogue. These issues should be reflected in the EU-US trade agreement currently under negotiation. Australia is also a prospective partner in that regard.
- We should continue work on the Southern Gas Corridor, enhancing cooperation with new suppliers from the Caspian Region as well as the Mediterranean, such as Azerbaijan, Turkmenistan, Iraq or Israel where new investments in the exploitation of energy reserves are being launched.
- In order to diversify oil supplies and attract new suppliers (e.g. from Kazakhstan or Azerbaijan) the EU should increase the scope of financial support to new oil-import

infrastructure and support investment in the refinery sector allowing for efficient oil processing regardless of the type of oil delivered.

6th pillar. Reinforcing the Energy Community.

The path to EU energy security leads through a stable and secure neighbourhood. Safe neighbours mean a safer EU.

- The Energy Community should continue to expand and enhance its institutional settings as well as its enforcement mechanisms. Priority should be given to build on the final report of the High-Level Reflection Group chaired by Jerzy Buzek in order to reinforce the Energy Community.
- Support of the EU for the Energy Community should be streamlined especially towards Ukraine and Moldova to enable the implementation and application of binding legislation under the Energy Community Treaty. The EU should provide technical support with regards to creating independent energy-market regulators in these countries.
- Significant progress should be made as regards the realization of missing projects that will connect the Energy Community countries, in particular Ukraine and Moldova, with the EU internal market. These include:
 - Gas reverse-flow on the Brotherhood pipeline;
 - Upgrading, developing and technical integration of electricity and gas grids of bordering Member States and upgrading interconnectors between EU and Energy Community countries;
- IFI and EU support for the modernisation of Ukraine's gas transit system should be accompanied by progress in the implementation of relevant binding legislation under the Energy Community Treaty (pointing to the need for an EU task force).
- A long-term strategy for developing indigenous energy sources and increasing energy efficiency should be further promoted in the Energy Community countries.
- Technical support on the part of the EU (and with the direct participation of the Commission) should be considered for the Energy Community countries (on request) in their IGA negotiations with energy suppliers from outside the EU. Legal capacities of the Energy Community Secretariat need to be strengthened in order to provide for swift and efficient implementation of the EU energy *acquis* in the Energy Community countries.
- A roadmap of merging various energy fora of the Energy Community with ENTSOs and ACER should be elaborated in order to prepare the Energy Community countries for their full integration with the European energy market.
- The establishment of efficient early warning mechanisms with Ukraine on gas in particular should be considered.