Energy Union Watch 5

June/August 2016

Action, preparation and evaluation

Actors \ Dimensions	Security of Supply	Energy Market	Energy Efficiency	Decarbo-nisation	Research
European Commission	9	9	3	9	6
European Parliament	N/A	3	3	6	N/A
European Council	6	N/A	N/A	N/A	N/A
Council of the European Union	N/A	N/A	N/A	N/A	N/A
Member States	6	6	3	3	3

About our evaluation

The above tab summarises the advance of the main European institutions and the member states as a whole under the five guiding dimensions of the Energy Union, as delineated in the Communication on the Energy Union of the 25th of February, 2015. Thus, the marks do not represent an evaluation of the state of the Union in the related sectors, rather a general assessment of the number and quality of actions which have been taken to address them from June to August 2016 (included), ranking from 0 (no action) to 12 stars (full action). A N/A evaluation indicates that it is not assessable at the moment. The elements which have been considered are the following:

- *Number of initiatives.*
- *Level of initiatives, evaluated by budget, number of involved member states, time frame, urgency of the situation, engagement of the private sector and other factors.*
- *Coherence, both with other European programmes and institutions and with the Energy Union project as a whole.*

In the ensuing pages, we included a brief list of events and actions which have influenced the evolution of the Energy Union, divided per guiding dimension.

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Foreword
Nicolò Sartori and Lorenzo Colantoni

New strength to dimensions which suffered from less attention in the past months, an evaluation of past initiatives and a (competition) focus on Member State activities: These three months witnessed significant activity on the Energy Union, which at the same time anticipates what is to be expected by the end of the year, and addresses lacks in the Commission's focus.

Times have indeed changed in these months, and will likely change more. The Brexit dealt a strong blow to the compactness of the EU, destabilizing it if only by force of how unexpected the choice expressed by British citizens was. Yet, having Britain outside the EU, when (and if?) article 50 of the TFEU is activated, will not necessarily have negative consequences on the Energy Union. The UK has not always supported a more compact European energy policy. Despite being a strong supporter of the ETS, particularly helpful against the Polish opposition and having promoted the liberalization of energy markets, the country is a strong advocate of capacity markets, which are currently under investigation by DG Competition. It still has significantly low interconnections and is lagging on its 2020 renewable target. Many, such as the Energy and Climate Change Committee (ECC) of the British Parliament and National Grid, have stated in the past months that it is very likely the target will be missed. Furthermore, the UK opposed another 2030 target, on energy efficiency, and its cohesion with Eastern and Central European Member States on this front caused more than a headache to the Commission during the October 2014 negotiations for the 2030 package, and led to a less ambitious level of improvement. An Energy Union without the UK would miss an important partner, but also benefit from a slimmer composition and possibly from greater ease in reaching compromises.
Yet, the UK has been a valuable partner in climate diplomacy, and indeed this is one of the sectors in which post-Brexit uncertainty is already taking its toll. More than in the EU ETS reform, which the UK supported, the effects can be seen in delayed ratification of the Paris Agreement. As the treaty was signed by the EU as a whole, and so the INDC, it is not clear what the role of the UK will now be. Meanwhile, other countries are ready to move faster than the EU, competing for the position the Union still likely holds as a "climate champion", in terms at least of decarbonization policies. However, as China and the US have already declared their intention to ratify the Agreement in the forthcoming weeks, and as an event hosted by the UN will take place on 21 September to boost the whole ratification process, it is possible that the Agreement will enter into force before EU sanctioning.

This is probably one of the most important reasons behind the significant activity of the Commission in decarbonization, or at least the proposal by Commissioner Cañete for EU ratification, presented this June. However, far more important is the much-expected Effort Sharing Regulation, proposed by the Commission in July and which contains the national targets for emissions reduction to achieve the 40% cut from 1990 levels Member States agreed on in October 2014. The established target was however valid only for the EU as a whole, and thus the 2030 package has been missing a few pieces, the Effort Sharing Decision being one of the most important. The Regulation, which has yet to be negotiated with the Council, interestingly includes the UK, without considering the Brexit referendum. This is possibly a confirmation of the Commission position not to act in any way before the official notification, or of the fact that the UK will likely continue its climate policy under the EU umbrella.

Nevertheless, decarbonization is not the only dimension which has witnessed greater activity. Indeed, the Commission boosted its efforts in Research and Development, after neglecting the sector almost since the launch of the initiative. Interconnections and grids have been at the core of the Commission's interests, as proved by a JRC analysis of the European distribution system operators and by demonstration projects in renewable energies integration. They have also been part of the Commission activity via funding provided to other interconnection projects through the Connecting Europe Facility (CEF), which completed its second (and last) round of financing for this year, for a total of 800 million euros.

More interconnections are indeed needed, at least to compensate for the constantly increasing uncertainty from the outside. In these months both the northern and the southern gas routes have proved problematic. Considering the first, the Commission can be glad of support received from the Polish Competition authority, whose opposition to Nord Stream 2 led the European partners of the infrastructure to drop out. Despite their assurance of continuing their support for the project, unpredictability as to how, when and if this will happen dampens hopes for the realization of a project to which the Commission, and VP Šefčovič in particular, look with great forethought. Yet, the situation in Ukraine is still far from being resolved, in particular regarding the energy sector. While Ukrainian storage is still at a low level and risks not attaining capacity at low summer prices, the country has asked for EU support in negotiation with Russia again—despite Naftogaz, the Ukrainian gas company, having held an opposite position in May. As Ukraine continues to complain of low gas pressure from the Russian side, the potential threat for European customers could anticipate a complicated situation on gas in the following months. It is harder to predict what will happen on the southern route. On the one hand, the rapprochement between Putin and Erdogan after the downing of the Russian jet by Turkish forces revived the projects of the first Turkish nuclear plant, Akkuyu, and of the Turkish Stream. Despite explicit support by Erdogan to the lattershortly before his meeting with the Russian president, it is still not clear what will come of this project which is dictated more by political than by economic motivations, and which the Turkish Parliament itself barely approved, due to widespread doubts on its feasibility and convenience.
Even if the Commission has been relatively quiet on the Russian side, DG Competition has been nevertheless extremely active. The Directorate approved a large number of projects, with a focus on renewables, however keeping up with the amount of infringement decisions, with energy being one of the sectors with the highest number in 2015, as reported by the Commission in its Annual Report. Apart from renewables, the target of DG Competition has been the full implementation of the Third Package, a leitmotiv of its activity in the past months, and gas transmission and supply, the latter being the reason behind the Commission's raid on the offices of the three major Romanian gas companies.
Finance was another key aspect of the internal market considered by the Commission, through evaluation of the Investment Plan and its role in the energy sector. On the one hand, a considerable portion has been invested in energy, almost one third. On the other, MEPs were sharply divided in judging the overall outcome, in particular because of the still limited expected leverage effect and thus of the overall funding. This is one of the reasons why analysts from the E3G think tank suggested a dedicated investment plan for the energy sector, which could improve quality by deployment of funding towards low-carbon projects.

Overall, action on the part of the Commission has been extensive, and could be likely interpreted as preparation for the months to come. The focus on decarbonization anticipates the new Directive on renewables, a significant yet delicate step as it will need to harmonize the complicated situation affecting the sector in the Member States, at the same time as preparing Europe for a global framework which has greatly changed since the last piece of EU legislation on the matter: renewables are now much cheaper and several major European companies are betting on them. A new market structure should be designed to adequately integrate these energy sources, while international competition puts pressure on the EU, both as a climate forerunner and as a leader in renewable technologies.
Meanwhile, the troubled situation at the borders of Europe, in particular in Turkey, the unclear position of Russia (outside) and of Britain (inside) put pressure on the Union, and in particular its energy sector. The very existence of the still young Energy Union could be put at risk by these forces—or not. Thanks to its novelty, the initiative could become instead a flexible tool to cope with the changes which affect the fabric of the EU itself. If the Energy Union is able to deliver the efficient tools the EU has failed so far to develop—such as an up-to-date market design suited to renewables, a working ETS and a coherent energy diplomacy—**nothing prevents it becoming an example of what the post-COP21, post-Brexit and externally troubled EU needs to evolve into.**

Five Guiding Dimensions
Details of the evaluation

1. Security of Supply
Evaluation: 9/12

As winter approaches and so the soaring of gas prices, the supply of this resource is the focus of the Commission's action. Indeed, VP Šefčovič himself seems to be concerned about the low storage reserves Ukraine is maintaining at the moment, a preoccupation which led to a declaration on the matter after a meeting with the country's prime minister, Volodymyr Groysman. The concern is increased by both the lack of cooperation on the part of Russia, apparently already decreasing the gas pressure in the system, and the uncertain future of Nord Stream 2, which could be the occasion for Russian retaliation. As the Commission increases its opposition to the infrastructure, the support of the Polish competition authority allowed the five European partners (Uniper, Wintershall, Shell, OMV and Engie) to leave the consortium—a victory compensated for by other factors, though, such as the EU's growing dependence on Russian oil, which increased by 8% in 2015 over 2000 levels, reaching 30%. Still unclear also the fate the southern gas route, which—as a consequence of the rapprochement between Turkey and Russia—could witness the revival of the temporarily buried Turkish Stream.

SECURITY OF GAS SUPPLY HIGH ON THE EU AGENDA

- The EU Energy Council was held in Luxembourg on 6 June, and focused on the guidelines to update the 2010 Regulation on security of gas supply, as proposed by the European Commission in February 2016. The EU Energy Ministers also agreed on a Council Position on Intergovernmental Agreements, which will be followed by negotiation with the European Parliament. In the Council Position, Intergovernmental Agreements on gas supply will follow a stronger control procedure than other contracts and must be inspected by the Commission before signature. At the meeting, eight Member States and Norway signed a political declaration to foster cooperation in the energy sector in the North Sea (7 June, here).
- An Informal Energy Council was held in Bratislava and chaired by the Slovakian energy minister, Maroš Stano, with the presence of Commission's Vice President Maroš Šefčovič. The agenda included the governance of the Energy Union, the financing required by the EU climate and energy objectives, energy prices and their relation to EU competitiveness, and the Commission's plans for the LNG and energy storage strategy of last February (13 July, here).
- The European Bank for Reconstruction and Development (EBRD) could provide up to 500 million euros for the Trans-Adriatic Pipeline (TAP), and attract one billion euros from other banks, according to the Azeri "trend" news agency. The article also reports that talks on this matter started in April and will continue for at least one year, as stated by Riccardo Puliti, the EBRD's energy and natural resources head (27 July, here).

UKRAINE AGAIN AT CENTRE STAGE

- In a meeting between Vice President Šefčovič and Ukraine's prime minister Volodymyr Groysman, the VP asked the country to increase its stocks of natural gas, now barely a third of total capacity (19 July, here). The meeting was followed by Ukraine demands for Commission mediation regarding gas purchases from Russia, to ensure adequate storage which will guarantee the country's consumption and transit to the EU. This despite last May's declaration by the Ukrainian gas company Naftogaz, in which it stated it would deal with Gazprom without the EU (20 July, here).
- Naftogaz has accused Gazprom of not maintaining sufficient pressure to grant gas exports to the EU, leading the Ukrainian company to face extra costs in order to balance the transit. As this issue has come up several times in recent years, the company has proposed that the Commission form a monitoring commission to directly check the flow (11 August, here).

FOCUS ON EU–RUSSIA GAS RELATIONS

- In a letter viewed by Reuters, Commission President Juncker stated that the impact of Nord Stream 2 would have effects beyond the legal point of view, altering the landscape of the EU's gas market. The existence of the letter, sent to nine Member States, has been confirmed by a spokeswoman for the European Commission and followed another, sent in March to eight Member States (Czech Republic, Estonia, Hungary, Latvia, Poland, Slovakia, Romania and Lithuania), which highlighted the potential "destabilizing geopolitical consequences" of Nord Stream 2 (16 June, here).
- Talks between Russia and Turkey have been revitalized after the rapprochement of the two countries formalized by the meeting between Putin and Erdogan on 9 August, and energy has been at the centre of the discussion. While Erdogan already stated before the meeting that the Turkish Stream project faced "no obstacles whatsoever", both countries confirmed resumption of work on the Turkish Akkuyu nuclear plant, entrusted to a subsidiary of the Russian nuclear energy company Rosatom. Russian energy minister Alexander Novak also announced the possible resumption of discounts on Turkish imports of Russian gas (9 August, here).
- Gazprom Western partners Uniper, Wintershall, Shell, OMV and Engie pulled out of the Nord Stream 2 project following July's objections by the Polish competition authority, which blocked its clearance on the basis that the infrastructure would increase Gazprom's market power and damage Poland's position. Despite the withdrawal, the five declared their continued willingness to participate in the project (12 August, here).

STRENGTHENING INTERCONNECTIONS

- A new gas interconnection agreement has been signed between the two network operators Bulgartransgaz (Bulgaria) and DESFA (Greece), allowing transportation of gas between the two Member States for the first time. The agreement is under the umbrella of the Commission initiative "Central and South Eastern Europe Gas Connectivity" (CESEC) (27 June, here). The agreement has been followed by two others, signed by gas network operators in Bulgaria and Romania and in Romania and Ukraine, both also within the CESEC, which will hold its next ministerial meeting on 8 and 9 September (19 July, here).
- The Balticconnector, the first Estonia–Finland pipeline, has been awarded 187.5 million euros by the EU. The infrastructure is meant to end Finland's complete isolation in terms of gas connections, this being the reason why the EU covered 71.5% of the project, despite the usual 50% cap applied to EU funding (15 July, here).

SECURING OIL SUPPLY?

- The Commission has launched a consultation on the "Evaluation of Directive 2009/119/EC imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products", aimed at establishing the implementation and issues of the Directive. The Consultation will be open until 11 November (10 August, here).

2. Energy Market
Evaluation: 6/12

It is a priority for the EU to improve energy investments, a tough issue for the Commission, due to the still strong national prerogatives on energy and the limited budget of the Connecting Europe Facility, which provides the backbone for European energy investments. Yet, the discussion was already triggered by the anniversary of the launch of the Investment Plan, also known as the Juncker Plan, which witnessed contrasting opinions by MEPs over its success. The extent of its leverage effect is still to be fully understood. Nevertheless, it was clear that energy garnered the lion's share of the funding, receiving 29% of total available funds—investments which are however hard to coordinate, due to the strong focus on private initiative, and thus unpredictable in terms of quantity and destination. This situation is not ideal for such expensive and risky investments, but could be potentially improved by a dedicated Investment Plan for energy. Yet, this would have to face economic and political contingences, such as the still unclear European energy demand, the lack of cooperation among Member States which has hampered the improvement of interconnections, and the structuring of the European energy market. The latter was already part of the Commission's action in these months, as demonstrated by the consultation on electricity gas network codes and guidelines, and by the intervention by DG Competition to achieve the full implementation of the Third Package, a matter that has seen strong Directorate involvement over the past months.

BRINGING FORWARD EU ENERGY INVESTMENTS

- MEPs' verdicts on the outcome of the Investment Plan for Europe—the so-called "Juncker Plan"—were significantly divided during a debate one year after its launch (8 June, here). Shortly afterwards, the Commission published a fact sheet highlighting the impact of the Investment Plan for Europe in the energy sector, with specific reference to the Energy Union. The document states how 29% of total funding has been diverted to the energy sector, for a total of 24 projects (14 June, here).
- The Commission has opened a 600 million euro call for proposals aimed at improving cross-border energy networks, financed under the Connecting Europe Facility (CEF). This is the second and likely last call of the year as the first, closed in April, released the first 200 million of the 800 million yearly budget. The call is open to proposals on the Projects of Common Interests (PCI) list, updated in November 2015 (30 June, here).

DISCUSSING REGULATION

- The 31st EU Electricity Regulatory Forum, held in Florence, discussed several features of the EU electricity market, and in particular the required upgrade of EU retail markets, the revision of the renewables directive, expected by the end of 2016, and the state of the implementation of network codes and guidelines (15 June, here; draft conclusions here).
- The Commission has opened a consultation on electricity and gas network codes and guidelines, as defined by the Third Package and regarding their future development from 2017. The consultation will be open until 14 October (18 July, here).

ASSESSING INTERCONNECTIONS

- The Commission has published a study, realized by Ractebel Engineering (TE), assessing the benefits from additional electrical interconnections between the Iberian Peninsula and the rest of Europe. The results highlight the positive effect of the connections, in particular regarding the Biscay Gulf interconnector (21 June, here).
- EU Member States agreed to invest 263 million euros from the Connecting Europe Facility (CEF) in trans-European energy projects. Out of the nine selected projects, five are in the gas (80% of the funding) and four in the electricity sector (20%), with a strong focus on developing gas interconnection facilities in the Baltic (15 July, here).
- The interactive map produced by the Commission on key cross-border energy infrastructure projects has been updated. The map includes the completed and ongoing Projects of Common Interest (28 July, here).

COMPETITION AT WORK

- DG Competition raided the offices of the Romanian companies Romgaz (state-owned gas producer), Transgaz (gas pipeline operator) and OMV Petrom (oil and gas firm). The Commission executive stated that the aim was to investigate anticompetitive practice in gas transmission and supply, which could have been hindering gas from and thus damaging other Member States (6 June, here). The inspections have also been confirmed by the Commission (7 June, here).
- Among July infringement decisions, the Commission has formally called on France regarding full implementation of the Third Package. Specifically, the reasoned opinion regards the Electricity Directive and the access to incumbents for “electricity from building and operating interconnectors to other EU Member States”. The infringement was already signalled by a formal letter from the Commission to France in February 2015 (22 July, here).
- DG Competition released the German company E.ON from its commitment to reduce long-term bookings on the NetConnect Germany grid five years before the forecasted end. As the commitments, requested by the Commission in May 2010, have been successfully implemented, this led to a relevant opening of the German market and thus relieved E.ON of the commitments which were supposed to last until 2021 (26 July, here).
- The Commission approved a series of support plans from Member States. For France, in line with EU state aid rules, it considered direct funding and feed-in tariffs for the French NEPTHYD tidal energy demonstration plant (27 July, here) and a support plant for combined heat and power natural gas plans (9 August, here). Funding of 27 million euros was approved for the Czech Republic to support hydropower and biogas (23 August, here), while the Commission also agreed on two 150 million euro renewable power generation plans by Luxembourg and Malta, presented in December 2015 (26 August, here; guidelines are available here).

3. Energy Efficiency
Evaluation: 3/12

Efficiency First has been one of the most underlined claims of the Energy Union, yet it is still probably the most neglected dimension. Energy efficiency featured in the Energy Union plans only in a few measures and in the heating and cooling strategy, and so was largely absent from the previous two legislative packages. Not by chance, the EU will probably miss its 20% target by 2020 and is clearly off track for its 2030 objective. This is also caused by the low compliance of Member States, especially in Central and Eastern Europe, and an inadequate focus of EU funding towards energy efficiency projects. This is a situation which the Commission could change in the next legislative package, together with the ambitious reform of EU energy governance.

EUROPEAN PARLIAMENT PUSHES ON EFFICIENCY

- The European Parliament amended and then approved the Commission proposal to upgrade current EU energy efficiency labelling, homogenizing the scale and simplifying the system to improve consumers' ability to compare and buy energy-efficient goods. The new rules will enter into force once negotiations between the Council and the Parliament are completed (6 July, here; infographic here).

REPORTING RENOVATION

- Plans for the structure of Energy Union governance, likely to be published by the end of the year, will probably include reporting of national building renovation rates. The measure will be meant to reduce uncertainty over European and national renovation rates, addressing a still inadequate level of energy efficiency in building, with more than 70% of EU building stock classified as highly inefficient (17 June, here).

MEMBER STATES FOCUSING ON EFFICIENCY FIRST

- A Green Paper by the German Ministry of Economic Affairs and Energy (BMWi) put the "Efficiency First" principle at the core of the Energiewende, asking for more ambitious measures in the sector to achieve the 2050 targets (12 August, here).

4. Decarbonisation
Evaluation: 6/12

The climate policy landscape on the global scene is changing rapidly. On the one hand, the EU benefits from its clear merit in achieving the success of COP21. On the other, competition from new players is strong and constantly present: while the EU has been delayed by Brexit in its ratification of the Agreement, the US and China are rapidly approaching their own ratification. Yet, the Commission has not been inactive. Initiatives such as the EU Global Covenant of Mayors for Climate & Energy, launched in June, are among the largest climate regional initiatives in the world, while cooperation with Asian Emission Trading Systems reinforces the position of the EU as a benchmark for climate policies. A primacy which is not paired by equal effort on the part of Member States: if Poland has been at the centre of a 20-billion fraud on the ETS, the UK shows significant results in renewable energies generation but fails in installing new capacity, and will likely fail to meet its 2020 15% renewables target. Nonetheless, the proposed Effort Sharing Regulation could provide a stronger framework for national climate action. Indeed, current national targets are now set only for 2020, and will be achieved with relative ease, as Member States' levels of emissions are still largely influenced by the stop in growth occasioned by the economic crisis. A stronger European economy will thus require enhanced national efforts, such as those proposed by the Commission in the Regulation and which were primarily divided on the basis of Member State GDP. This division, however, is still subject to negotiations with the Council and the Parliament.

THE FUTURE OF INTERNATIONAL CLIMATE COOPERATION

- In June, Climate and Energy Commissioner Cañete presented a proposal for EU ratification of the COP21 Agreement, in line with the forthcoming definition of the national emissions reduction targets (10 June, here). However, if Brazil, China and the US ratify the Agreement before the EU and if the 21 September event organized by the UN to boost the process has the expected accelerating effect, it is likely that the Agreement will enter into force before the EU's signature (26 August, here; more info about the 21 September event here).
- The EU Covenant of Mayors and Compact of Mayors launched the EU Global Covenant of Mayors for Climate & Energy, the world's largest cities initiative to fight climate change from a local level. It will involve 7,100 cities in 119 countries over six continents, for a total of 600 million people (22 June, here).
- A 3.5 million euro cooperation project has been launched by the EU to support the Korean Emissions Trading System (KETS), the first in Eastern Asia. The partnership is meant to share the ten years of EU experience with its EU ETS, in order to improve what is Korea's most important tool in achieving the COP21 objectives (7 July, here). This follows the development of a similar cooperation project with China, for which 10 million euros have been recently earmarked by the EU to support the launch of the first nation-wide emission trading scheme in China (28 June, here).
- The Commission unveiled its proposal for the Effort Sharing Regulation, describing the national targets for emissions reductions necessary to achieve the EU target of -40%

compared to 1990 levels, in 2030. The proposed division assigns the lion's share of efforts to the richest EU countries, in particular Sweden, Luxembourg, Finland, Denmark, Germany, France, Austria and the UK, which is included despite post-Brexit uncertainty. Others, especially from the Eastern block, such as Poland and Bulgaria, have targets ranging from 0 to 10%, compared to 2005 levels. The proposal has now to be approved by the Member States; it has been published with a package of other documents, such as a Communication on "Accelerating Europe's transition to a low-carbon economy", a European Strategy for Low-Emission Mobility, two consultations on the revision for CO2 emission performance standards for vehicles and a legislative proposal for a Regulation on the inclusion of land use, land use change and forestry (LULUCF) in the 2030 Climate and Energy Framework (20 July, here).

REDUCING EMISSIONS

- The European Parliament has backed plans to reduce emissions from internal combustion engines used by non-road mobile machinery (locomotives, bulldozers and others). The scheme, approved by 623 votes to 57, also tightened the proposal designed by the Commission (5 July, here).
- The European Parliament aims at offsetting its 2015 carbon emissions, in order to become the first completely carbon neutral EU institution. The proposal extends already existing carbon-offsetting schemes, in existence since 2011 but with only limited coverage of the Parliament's activities (25 July, here).
- 62 million euros have been channelled from the Investment Plan for Europe by the European Investment Bank (EIB) to wind and solar farms across the EU. The funds will be delivered thanks to an agreement with the financial company SUSU Partners AG and its SUSI Renewable Energy Fund II (29 July, here).

CONTRASTING EFFORTS BY MEMBER STATES

- France jailed Jaroslaw Klapucki, the founder of Consus, the largest Polish carbon quota brokerage firm, for a 10 to 20 billion VAT fraud against the EU ETS, operated all across Europe from 2008 to 2010. Despite two audits having taken place in Poland on Consus activities in the past years, the country denied wrongdoing and called the event "an unfortunate accident" (18 July, here).
- In 2015, clean energy sources accounted for 46% of British electricity, surpassing coal for the first time. The result was achieved thanks to an increased wind and solar contribution, but also to the conversion of the largest British coal-fired power station, Drax, into biomass (28 July, here).

MOVES TO END THE DEPENDENCE ON COAL

- The Commission authorized 2.13 billion by Spain to smooth the closure of 26 uncompetitive coal mines, as the measure was judged in line with EU state aid rules for its positive effect on reducing social and environmental impacts. The mine closure is planned for 2018 (1 June, here).

5. Research
Evaluation: 6/12

Another dimension which the Commission focus has often bypassed, Research and Development has in the past months received renewed attention. Possibly influenced by the new JRC programme, enacted earlier this year for 2016 and 2017, the Commission worked on its knowledge of the European energy systems, in particular electricity distribution networks and grids, empowering also scientific research via financing technologically advanced solutions, such as smart grids and new renewables. The research framework also benefits from increased funding for Horizon 2020 projects for 2017, whose focus on energy and climate has already been made clear in the work programme published by the Commission.

GREAT ATTENTION TOWARDS GRIDS

- New indicators and models for electricity distribution networks have been designed by JRC scientists after an analysis of European distribution system operators. The analysis is a result of the activities of the JRC's Distribution System Operators Observatory and aims at providing policy makers with more accurate energy-related figures (1 July, here).
- A JRC report mapped the priorities on a regional and national level for smart strategies in the energy sector. The different regional focus was analysed on the basis of regions and countries showing "common energy technology interests", as defined by the SET-Plan, and showed stronger interest in energy efficiency, smart grids, e-mobility and wind over other technologies (5 July, here).
- GRID4EU, a project financed by the EU for 47% of its budget, has explored smart grid solutions to enhance renewable energy integration into the grid in six Member States (Germany, Italy, Spain, Sweden, the Czech Republic and France), involving also storage, smart water boilers and advanced grid control (11 August, here).

FROM RESEARCH TO MARKET

- The Finnish company AW-Energy will receive a 10 million euro loan for its demonstration project for the WaveRoller concept, which aims at producing electricity from waves. The project is the first to receive funding under the umbrella of the InnovFin Energy Demo Project Facility, a sectoral debt facility for technologically risky projects backed by the European Investment Bank (6 July, here).

SCIENCE FOR ENERGY

- An update of the Horizon 2020 Work Programme delivers 8.5 billion euros to be assigned to research and innovation starting in 2017. A reference to energy and the Energy Union is explicit in the third point, titled "A Resilient Energy Union with a Forward-Looking Climate Change Policy". Among the top priorities, the document lists the development of lithium batteries for transport, energy storage and improvements in grids (25 July, here).

Public debate

EU PATHWAYS TO A DECARBONIZED BUILDING SECTOR: ECOFYS

- The consultancy Ecofys analysed the potential of an increased energy efficiency in European heating systems in terms of emissions reduction, for the European Heating Industry Association. Due to the high level of energy consumption by the heating and cooling sector (50% of total European consumption), its great inefficiency (65% of the boiler stock being considered inefficient) and a very low replacement rate (estimated at 4% a year), the study highlights a strong potential contribution by an increase in the replacement rate of old systems with state-of-the-art technologies. A supposed rise by 25% over 2015 levels, covering thus 8.5 million households a year, was estimated, leading to a 18.5% emissions reduction in the next 15 years. Ecofys judged the rise strongly positive to reach the 2030 and 2050 climate and energy objectives, and achievable if dedicated policies to accelerate the replacement rate are put in place on the European level (30 June, here).

TOWARDS AN EFFECTIVE EU FRAMEWORK FOR ROAD TRANSPORT AND GHG EMISSIONS: CEPS

- In a report by Christian Egenhofer, Andrei Marcu and others, the Centre for European Policy Studies (CEPS) discussed different policy options for the EU to address transport emissions post-COP21. The document anticipates the forthcoming Communication by the Commission on the decarbonization of the transport sector, highlighting suggestions and tools to achieve the 30% emissions reduction objective (on 2005 levels) for non-ETS sectors the EU has set for 2030. CEPS divides its suggestions into "no-regret options", supporting already existing low-carbon technologies, and "measures for consideration", involving such less certain possibilities as power to gas or the electrification of transport. Among the final recommendations, the think tank underlines elimination of the development gap between the test cycle and real emissions (one of the faults behind the Dieselgate scandal) and avoiding existing distortions to implement technology neutrality (July, here).

A STUDY ON OIL DEPENDENCY IN THE EU: CAMBRIDGE ECONOMETRICS

- The focus of the discussion on European security of supply is mostly on gas, for its importance in European consumption and its expected role to compensate renewables intermittency and in structuring the energy market. Yet, as reported by Cambridge Econometrics, oil dependency has been steadily growing in Europe, and mostly from its most feared supplier: Russia. Even if overall consumption has declined, the share of imports has increased, reaching 88% of the total in 2015, with Russian oil contributing 30% of imports. The circumstances also replicate the weaknesses of the gas market, such as the sole dependency of some European countries on Russia as a single or largely majoritarian supplier. However, if the framework for gas is clearly taken into consideration by the Commission and Member States, oil is often underestimated. A dangerous situation, if we consider that the EU is still missing a significant shift from oil-fuelled transportation to alternative fuels (LNG, CNG), or electrical vehicles (11 July, here).

EUROPE NEEDS A STRONGER INVESTMENT PLAN FOR THE ENERGY UNION: E3G

- The London-based think tank gave an evaluation of the Investment Plan, highlighting its positive impact on the EU energy sector, by far the single biggest recipient with 4 of the 21 billion made available, but asking for a stronger plan devised to support the Energy Union initiative. E3G points out the lack of funding for electricity networks and residential building efficiency, the need to stop the flow of funds towards high-carbon projects, particularly in the gas and transport sectors, and the inadequacy of geographical coverage, missing the potential of Central and Eastern European countries for energy efficiency and gas interconnections. As the EU is facing increasing competition from the US and China in the energy and climate sectors, the report suggests a plan focusing on projects which are scalable, have high leverage potential, are in underinvested contexts and are climate-resilient (2 August, here).

Brexit Special

Please find below a selection of articles, reports and studies on the impact of Brexit on the EU and the Energy Union.

REPORTS

- E3G – "Brexit Shakes Up Energy & Climate Landscape But Fundamentals Unchanged" (June 24, here)
- CSIS – "What Does a Brexit Mean for Energy Markets?" (June 29, here)
- Carbon Brief – "Brexit: 94 Unanswered Questions for Climate and Energy Policy" (29 June, here)
- CEPS – "Brexit and Climate Policy: Political Choices Will Determine the Future of EU–UK Cooperation" (15 July, here)

ARTICLES

- Politico – "5 Ways Brexit Will Transform Energy And Climate" (24 June, here)
- Financial Times – "Brexit: The Impact on UK Energy Policy" (27 June, here)
- The Guardian – "Siemens Freezes New UK Wind Power Investment Following Brexit Vote" (28 June, here)
- Reuters – "Brexit Spells End to EU Leadership in Climate Diplomacy" (30 June, here)
- Financial Times – "Brexit Doubt Weighs on Green Energy Groups" (3 July, here)
- Euractiv – "Brexit's Impact on Fracking and Carbon Storage under Spotlight" (11 July, here)
- Bloomberg – "Brexit May Make It Harder for U.K. to Tackle Climate Change" (11 July, here)

Interview

Nathalie Tocci

Special Advisor to the EU High Representative for Foreign Affairs and Security Policy

- **The Global Strategy is an ambitious and much needed item to give direction to a Union which increasingly needs compactness. However, it may face obstacles in its implementation, the first likely being the opposition of the Member States. How does the Strategy expect to coordinate national strategies?**

The EUGS, while it was a document of the HRVP, was discussed extensively with Member States and the European Commission. The negotiations, which took place over the course of many months, went down to every sentence, word and comma of the Strategy. There is nothing in the document that Member States did not approve. This is the context in which the European Council welcomed the presentation of the Strategy. This said, the Strategy is a political document which is not legally binding. Follow-up work will therefore be necessary to ensure that the evolution of the EU's energy policy is EUGS compliant and that Member States in practice live up to the commitments made on paper.

- **Another key issue is the coordination of the different European institutions dealing with EU energy diplomacy, ranging from DG Energy to DG DEVCO and others. How could the EEAS, and particularly the Global Strategy, enhance this aspect?**

A more joined-up Union is one of the leitmotifs of the EUGS. And the EU needs joining up in a number of areas. Some of these have to do with the internal–external nexus, a nexus which is extremely relevant also to the energy field where the internal dimensions of our energy policy must dovetail with the external. This is evident both in the Energy Union and in the EUGS itself. In other ways, the joining up requires work across different policy areas and institutions, of which energy, climate, development, ENP, competition, trade and regional policy are but a few. In order to ensure joined-up action in practice, the implementation phase of the EUGS will try to encourage joint task forces involving different Commission DGs, Council formations and the EEAS, with relevant joint meetings of the Council and its preparatory bodies.

- **More specifically, the diplomatic aspect of the European energy policy has been renewed by the Energy Union, largely absent from the Ashton-Barroso plans. The role of the EEAS was also already clearly stated in the 25 February Communication; how, then, will the Global Strategy and the EEAS relate to the Energy Union project?**

Part of the work that is being launched now, following the publication of the EUGS, regards making existing initiatives compliant with the Strategy. Energy diplomacy, along with economic, cultural and public diplomacy, is a key case in point. What is clear is that our dialogue and partnerships with third countries must become increasingly holistic. When we engage in relations with the US, China, Turkey or Azerbaijan, energy can never be the only subject of discussion, but energy must be present and must be integrated into a broader whole. At the same time, discussing trade, development or security with many of our partners would be incomplete without an energy and climate component. Energy diplomacy, in other words, must be viewed as part of a more complex whole. It is this "whole" that makes the EU an influential and valuable interlocutor to our external partners.

- The Global Strategy explicitly mentions a "Global Governance for the 21st century". In this respect, COP21 has marked a significant shift and a remarkable success. Do you believe that climate governance could represent the basis for a reform of the existing global governance system? And what could be the role of the EU in this?

There seem to me to be three key components of a successful implementation of the Paris climate deal. The first regards the EU's own implementation of the deal. Our global credibility in this field hinges on our ability to lead by example. The second dimension relates to our ability to support our partners, notably to the east and south, to engage in effective climate action. We must assist our partners, through development policy and the revised ENP, to enhance their resilience in climate and energy terms and live up to their own commitments under COP21. Third, but only as a consequence of successful action on the first two counts, the EU must continue to build on a progressive climate action alliance at the global level. This was indeed part of the secret of success in Paris, compared to the failure in Copenhagen in 2009.

- The changing context around Europe requires a new approach to regional cooperation, with the energy sector being one of the most affected, as in the case of the MENA region, for instance. What is the vision of the Global Strategy and the potential contribution of the EEAS on this?

The EUGS places much emphasis on the notion of resilience. Resilience has multiple dimensions and multiple paths for successful action. One key dimension of a resilient state and society has precisely to do with energy and climate. The EU must help its partners in the south to engage in an effective energy transition, mindful of the need to do so in a cautious and careful way in light of the potential political and societal disruptions that it might cause if badly managed. It is in this spirit that the EUGS sets out the ambition of energy and environmental reform work, echoing the existing work strands within both the Commission and CSDP regarding security sector reform.

Roadmap for the Energy Union

18/11/15 State of the Energy Union

16/02/16 Winter Package

Security of Supply

- □ Communication on infrastructures and measures to reach the 15% interconnection target
- □ Review of the Directive concerning measures to safeguard security of electricity supply
- □ Memorandum of Understanding on an upgraded strategic partnership with Ukraine
- □ Report on the European Energy Security Strategy

- ✓ Review of the Decision on information exchange mechanism with regard to intergovernmental agreements between Member States and third countries in the field of energy Revision of the Regulation on security of gas supply
- ✓ Liquified Natural Gas and storage strategy

Energy Market

- □ Initiative on market design and regional electricity markets
- □ New Deal for energy consumers
- □ Review of the Agency for the Cooperation of Energy Regulators (ACER) and the energy regulatory framework
- □ Review of the Guidelines on State aid for environmental protection and energy

Energy Efficiency

- □ Review of the Energy Efficiency Directive
- □ Review of the Directive on Energy Performance of Buildings including Smart Finance for Smart Buildings initiative
- □ Review of Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles

- ✓ Review of the energy efficiency framework for products
- ✓ EU strategy for Heating and Cooling

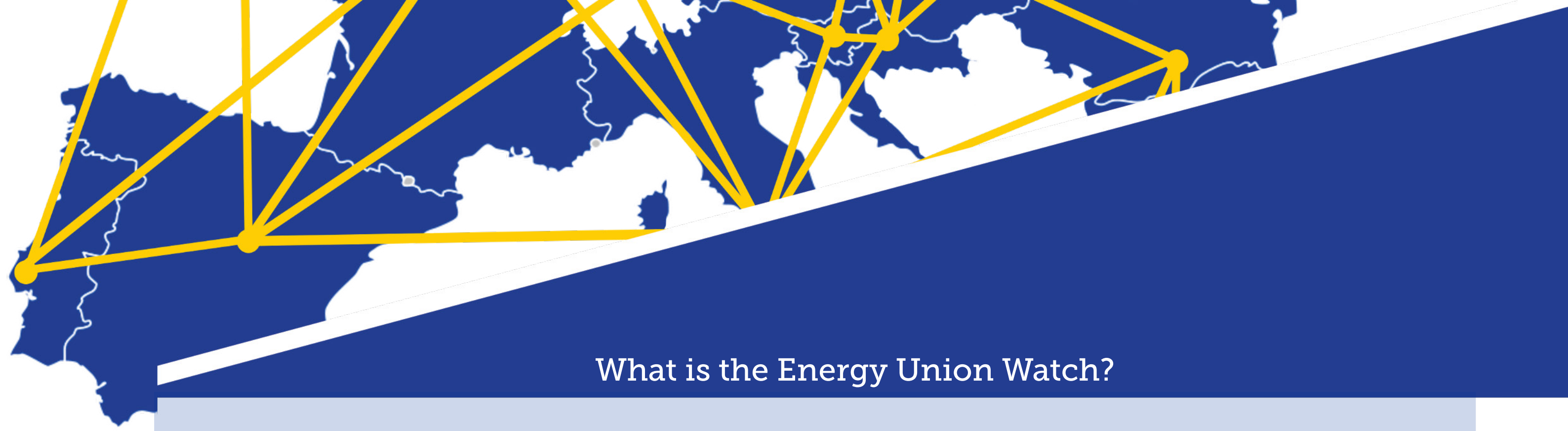
Decarbonisation

- □ Legislative proposal to revise the EU Emissions Trading System, 2021-2030
- □ Communication on decarbonising the transport sector
- □ Review of Regulations setting emission performance standards to establish post-2020 targets for cars and vans
- □ Renewable Energy Package: including a new Renewable Energy Directive for 2030
- □ Establishing a monitoring and reporting system for heavy duty vehicles

Research and Innovation

- □ A new European energy R&I approach to accelerate energy system transformation, composed of an integrated Strategic Energy Technology (SET) Plan and a a strategic transport R&I agenda

The items in this timeline have been listed by the Commission in the 2015 State of the Energy Union. Those with a check mark (✓) are the initiatives already taken by the Energy Union since the publication of the State.



What is the Energy Union Watch?

The Energy Union Watch, a project launched by the Istituto Affari Internazionali (IAI) in cooperation and with the support of Edison, responds to the exigency of following step by step the evolution of one of the most ambitious initiatives launched by the Juncker Commission, the Energy Union, and bringing the discussion closer to public opinion and the key stakeholders.
The project aims to monitor the activities of the key EU institutions—the European Commission, the Council of the EU, the European Parliament and the European Council—on the five Guiding Dimensions envisaged by the Energy Union. The Energy Union Watch also covers and illustrates the debate among the key national end European stakeholders, including industrial players, think tanks, and interest groups, on the evolution of the policies and the measures adopted in the framework of the Energy Union. Finally, in order to sensitise the citizens and contribute to the public debate, it offers an analytical assessment of the milestones and results achieved in the framework of the Energy Union, presenting a set of recommendations for the activities to be proposed and implemented.
The Energy Union Watch is produced on a quarterly basis, collecting official documents, public information and open source data, which are processed and analysed by the IAI team. The content of the Watch will evolve over time, integrated and enriched thanks to a process of interaction with experts and stakeholders belonging to the IAI and Edison networks.

About the IAI

http://www.iai.it/en/
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Founded by Altiero Spinelli in 1965, the Istituto Affari Internazionali does research in the fields of foreign policy, political economy and international security. A non-profit organisation, the IAI aims to further and disseminate knowledge through research studies, conferences and publications. To that end, it cooperates with other research institutes, universities and foundations in Italy and abroad and is a member of various international networks. More specifically, the main research sectors are: European institutions and policies; Italian foreign policy; trends in the global economy and internationalisation processes in Italy; the Mediterranean and the Middle East; defence economy and policy; and transatlantic relations. The IAI publishes an English-language quarterly (The International Spectator), an online webzine (AffarInternazionali), two series of research papers (Quaderni IAI and IAI Research Papers) and other paper series related to IAI research projects.

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