

The great debate on Europe's decarbonisation

Actors	Dimensions	Security of Supply	Energy Market	Energy Efficiency	Decarbo- nisation	Research
Europan Commission	European Commission					
European Parliament	European Parliament	* * * * * N/A * * * *	* * * * * N/A * * * * *	* * * * 9 * * * *	* * * * * 9 * * * *	* * * * * N/A * * * *
	European Council					
	Member States	* * * * 3 * * * *	* * * * * 6 * * * *	* * * * * N/A * * * *	* * * * * * * * *	* * * * 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 April to June 2018 (included), ranking from N/A (no action) to 12 stars (full action). 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.





Foreword Nicolò Sartori and Lorenzo Colantoni

The Energy Union has started its great debate on the future of Europe's decarbonization – a long, heated discussion which is however fundamental both to guarantee the achievement of the targets of the Paris Agreement, and to prepare the EU for the upcoming challenges brought by the surge of renewables worldwide. The picture has become more complicated than it appeared in November 2015, when the Agreement was signed, and the international turmoil caused by President Trump's decision to exit the treaty is hardly the only or even the most relevant cause of this change. The still strong heterogeneity of European countries, both in terms of energy and climate vision and regarding their energy mixes, the tough and perhaps increasing competition on renewables by China, the unclear efficacy of European tools designed to promote renewables and decarbonize the economy – still incomplete or barely functioning, as in the case of the EU-ETS – are all casting doubt on the trajectory of Europe's decarbonization. The situation will be perhaps be clarified by the outcome of negotiations underlying several pieces of legislation in the Clean Energy for All Package, which commenced in the past months and whose completion has come closer thanks to recent activity on the part of the Commission, the Parliament and the Council.

The EU has still to deliver its tools to decarbonize its economy and energy generation, yet it may already be too late, since European emissions have started rising again. Indeed, 2017 witnessed a 1.8% increase in emissions compared to 2016, and this confirms what many feared – that the EU will be able to reach its 2020 emissions reduction target because of the 2008 economic crisis, rather than thanks to the extent and quality of its decarbonization measures. The issue concerns not only Eastern and Central European Member States, whose difficulties in reducing emissions were known, but also large economies, Germany and the UK foremost among them (as also underlined in a CAN Europe report). Meanwhile, air quality remains low also in more virtuous countries, such as France and Italy, which have been referred to the EU Court of Justice by the European Commission for breaching the agreed standards.

Such a negative performance finds its roots in the behaviour of Member States, but also in the lack of a clear EU framework. The 2014 climate and energy targets have indeed been agreed on the European level, but the national repartition of emissions reduction efforts and the shares of renewables were approved only last May. Yet, the main pillars have been finally set: 2021–2030 national emission reduction targets have been established, while the Council, the Parliament and the Commission have reached an informal agreement on the regulatory framework and target for renewables. Positively, the level of ambition for renewables has been raised to a 32% share by 2030 (compared to the 27% agreed by Member States last December), with also an upward revision clause for 2023. The regulatory framework supplies a wide series of elements to support new technologies, also dealing with sectors often left aside by the decarbonization debate (heating and cooling, conventional biofuels). In this sense, the Commission has been working hard on translating the Clean Energy for All Package, proposed in November 2016, into reality.

Energy efficiency has been a significant component of this package, and indeed has been a major element in the recent decarbonization debate. The discussion over energy efficiency concluded with a success, since the level of ambition in the 2030 target has been raised to 32.5% (compared to the previous 27%), after long trialogue negotiations whose outcome had been unclear until the past few weeks. The result is particularly positive when considering the concurrent approval of the review of the Energy Performance of Buildings Directive, and the not particularly positive past record of the Energy Union in dealing with energy efficiency.

Renewables and energy efficiency have not been the only elements of the Clean Energy Package to be discussed, though, since also the role of ACER has been at the core of the debate in the past three months. A key element of the second Winter Package, expansion of the powers of the agency,



as proposed by the Commission, envisages a more active role of ACER in the definition of European energy regulation. This, in opposition to the more supportive function accorded to the agency at its conception. Yet, this change touches on issues of sovereignty and national prerogatives; and considering the already stark differences among the Member States' vision, finalization of trialogue negotiations on the Commission proposal still appears remote.

The other big news involving the European energy market is the announcement, by the Commission, of the end of the Gazprom competition case. DG Competition has indeed accepted the commitments proposed by the Russian company last February, adding the possibility of a 10% fine on Gazprom's global revenues in case the commitments are breached. Yet, the real impact of this move is not clear. Many observers judge the absence of a fine imposed on Gazprom for its previous behaviour as a net victory for Russia, while others doubt the efficacy of the obligations in breaking Gazprom's monopoly in several Eastern and Central Member States. However, the reply of Commissioner Vestager is clear, as she stated that the obligations are legally binding under the EU's antitrust Regulation 1/2003, and that imposing a fine would have instead simply prolonged the resolution of the case (due to the likely Gazprom appeal of such a decision).

Nevertheless, the position of Russia in the EU energy market appears brighter. In addition to the resolution of the competition case, Nord Stream 2 (NS2) construction proceeds, despite continued opposition by the Commission, several Member States, including Poland and the UK, and even the US. Indeed, following Sweden's approval of the construction of NS2 in its Exclusive Economic Zone, only Denmark remains to grant permits for the pipeline. The greatest hope for the Commission and for Member States opposing NS2 is likely the revision of the Natural Gas Directive, which would transfer more powers on security of supply to European institutions, also extending the application of the EU Gas Directive to import pipelines (NS2 included). This is why some Member States, and notably Poland, are trying to accelerate the process of revision – even if it is not clear whether Russia would ever accept the Commission's competency on the infrastructure.

The future of NS2 is, however, also linked to Ukraine. As Germany puts timid concerns on the table over the economic damage to Ukraine if the country loses its gas transit fees, both Europe and Russia are discussing the future role of Kiev, whose gas transit is threatened by an aging transmission system and by alternative routes: NS2 and, in the South, TurkStream, whose sea portion has been recently declared completed by Gazprom. Yet, competition in the South is stronger for Russia, particularly after the completion of the Trans Anatolian Natural Gas Pipeline (TANAP) last May. The pipeline is a core part of the Southern Gas Corridor and, carrying Azeri natural gas, it is a close competitor with the Russian gas delivered by TurkStream. Nonetheless, the European segment of the Southern Corridor, and particularly the Trans-Adriatic Pipeline (TAP) between Italy and Greece, could also be of interest to Russia, to ship to Europe the gas TurkStream will now bring to Turkey. Paradoxically, a Commission-sponsored infrastructure could end up being of interest to Russia itself.

The Energy Union is working on providing Europe with the tools for a changing world. The recent significant focus on decarbonization confirms the extension of scope of the initiative, which successfully evolved from the original strongly political perspective and focus on security of supply, to providing a wider framework for Europe's energy and climate policies. Yet, the variables in the equation are still many, and the success of the measures proposed in the second Winter Package is anything but sure. The rise in emissions and the still high share of coal in the generation of countries such as Germany and Poland confirm the limited effectiveness of the past EU renewables and climate policies. The current debate and the divide between the different visions of Member States cast shadows on whether future measures will be more effective, and if the targets – whose level of ambition has just been raised – will actually be reached by the EU. The Commission should therefore work hard to fill this gap, perhaps using the Energy Union and the momentum brought by the booming of the energy transition worldwide, to achieve this much needed shift in the EU climate and energy perspective. A hard task, to be sure, especially during such difficult times for the Union.





Five Guiding Dimensions Details of the evaluation

Building the Energy Union

A STRONGER GOVERNANCE

- The EU Council, Parliament and Commission reach an agreement on the governance system, which will allow the Union to effectively manage a common energy policy for all EU Member States. With this deal, four out of eight legislative proposals of the Clean Energy for All Europeans package is agreed by the co-legislators (20 June, here). The provisional agreement on governance is later confirmed by the Council (29 June, here).
- The new rules foresee several obligations, including national energy and climate plans for the period 2021–2030 covering all dimensions of the Energy Union; reporting obligations across the five dimensions of the Energy Union and the Paris Agreement; regional cooperation mechanisms; and follow-up on progress made by Member States on renewable energy, energy efficiency and interconnection targets. The political agreement furthermore foresees flexibility to reflect Member States' specificities and to respect their freedom to define their energy mix (20 June, here). More in detail, the regulation sets a "trajectory" for MS to meet the EU objective of 32% renewable energy by 2030: indeed, they will collectively have to achieve 18% of the EU renewable energy objective by 2022, 43% by 2025 and 65% by 2027 before attaining the complete objective in 2030. A similar path is foreseen for energy efficiency, with the same intermediary reference years at 2022, 2025 and 2027. The evaluation of the gap becomes a prerogative of the Commission, which will be able to decide eventual policy initiatives to fill it (20 June, here).
- On the 2050 climate vision, the governance regulation underlines the need for a zerocarbon economy and anchors the concept of "carbon budget" into EU law (20 June, here).



1. Security of Supply Evaluation: 3/12



The geopolitical discourse is focussed on Ukraine, a country exposed to future economic and energy uncertainties due to both Russian and European strategies for the diversification of gas routes. In this regard, Bulgaria showed strong interest in taking its place, probably tempted by the significant transit fees but potentially exposed to more profound dependence. The doubling of the North Stream pipeline remains a hot spot at both the European and the international level since, despite Polish attempts to speed up the revision of the Natural Gas Directive and the tensions recorded between Russia and the USA, the project advances. Progress is also registered in the construction of the Southern Corridor, with the inauguration of its starting point, southwest of Baku,, and of the TANAP. The initiatives for the assimilation of the Baltic grids within the Continental European Network (CEN) - one pressing security priority and a project of common interest for the Union represent an awaited step for the construction of a deeper European energy integration.

NS2 GOING FORWARD DESPITE WIDESPREAD OPPOSITION

- The doubling of North Stream is dreaded by US intelligence as a way to allow Russia to place new listening and monitoring technology in the Baltic Sea (18 May, here). Likewise, the UK considers the project as "divisive", as Foreign Minister Johnson highlights the importance of diversifying gas suppliers and aligning with the US position (22 May, here). Russian President Putin, on the other hand, considers Trump's remarks as an attempt to promote the interests of US shale gas (18 May, here). Despite this debate, the NS2 Director states that the US dispute won't affect the timeline for its construction (25 May, here).
- After Sweden awards NS2 approval to construct and operate in its Exclusive Economic Zone (EEZ), Denmark remains the last country that needs to concede permits for the Nord Stream 2 pipeline (8 June, here).

STEPS FORWARD ON THE NATURAL GAS DIRECTIVE

- European institutions are debating the amendments to the New Gas Market Directive, that might likely change the balance of power between the European Union and Member States, since the EU would have much more authority on MS energy security (10 April, here). Within the Parliament, the final report by the Rapporteur Jerzy Buzek (EPP, Poland) is endorsed by both the ITRE committee and the April plenary session. The final report applies the gas directive to offshore pipelines crossing the territorial waters and/or the EEZs of EU Member States (20 May here).
- In this regard, ten Member States, the Parliament and the Commission support Poland's call for accelerating the work on the amendments to the directive, considered as a way to block NS2 development (12 June, here).



REDEFINING GAZPROM PRICES

• The Commission tries to put an end to Gazprom's behaviour as a dominant actor in several countries – a situation which breached EU antitrust rules – by imposing on the company binding obligations to allow flow of gas in Central and Eastern Europe at competitive prices. The Commission however can impose a fine of up to 10 % of the company's yearly income in case it breaks its commitments, "without having to prove an infringement of EU antitrust rules" (24 May, here). Gazprom's monopoly is however largely believed to continue after the resolving of this seven-year dispute (25 May, here). Indeed this move, which foresees binding obligations but no fines – in contrast to what many Member State had pressed for – is considered by many as a victory for Gazprom (7 June, here).

UKRAINE: DEBATING ITS TRANSIT ROLE, ECONOMIC AND ENERGY CONCERNS

- Germany puts on the table concerns over the Ukrainian gas transit role, considering the economic and political impact Ukraine might suffer from ongoing projects. In particular, Ukraine risks losing billions of euros if Gazprom decides to fully circumvent its territory for the transit of Russian gas to Europe: in this sense Chancellor Merkel considers that NS2 cannot go forward "without clarity on the future transit role of Ukraine" (10 April, here). The Russian response arrives through Foreign Minister Lavrov, who affirms that Russia may allow some gas transits through Ukraine as long as this is "economically feasible" and not "politically imposed" (10 May, here). In parallel however, Russian's plans to bypass Ukraine are going forward, with Gazprom announcing that the sea portion of the TurkStream is completed (30 April, here) and Bulgaria's Prime Minister Borisov declaring that the second fork of TurkStream will pass through his country to allow gas deliveries to European consumers (30 May here). In this context, Sofia launches a tender for a new gas link with Turkey to convince Russia to choose Bulgaria rather than Greece. EU officials fear that Bulgaria's moves may enhance even further the country's dependence on Gazprom and consider that Sofia's stronger motivation could be earning transit fees (27 June, here).
- A second element of tension regards the dispute between Gazprom and Naftogaz over the Stockholm arbitration ruling against Russia. In order to persuade Russia to respect the sentence, the Ukrainian President instructs Naftogaz to seize overseas assets of Gazprom and shares in the NS2 pipeline (30 May, here).
- The European Investment Bank (EIB) sustains a modernization programme for the Ukrainian transmission infrastructure, by lending 136 million euros to Ukrenengo Ukraine's National Power Company in order to ensure a reliable source of electricity for Ukrainian citizens and companies (24 May, here).

SUPPORTING A STRONGER INTEGRATION OF THE BALTIC REGION

• A 125,000 euro grant from the Connecting Europe Facility (CEF) is signed to support a technical study on the Baltic synchronization process, a project to physically integrate the Baltic State grids with continental Europe (18 April, here). An important step forward arrives with the signing of a Political Roadmap between EC President Juncker and the Heads of State/Government of Latvia, Lithuania, Estonia and Poland that defines the process and timetable of action, starting with the launch of the ENTSO-E procedure to extend the Continental European Network (CEN) to Baltic States. The roadmap moreover fixes the target date of 2025 for the full synchronization (28 June, here). The integration of the Baltic



grids within the European network is considered as a priority of the Energy Union, and the related grid reinforcements are listed in the third EU list of Projects of Common Interest (PCIs). The three Baltic countries are indeed synched and remain largely dependent on the BRELL energy network dating back to the Soviet era, thus desynchronization has become an important political issue – particularly for Lithuania, which has objected to a nuclear power plant on its border with Belarus that President Grybauskaitė called a "Russian geopolitical project" (29 June, here).

• On the sidelines of the Energy Infrastructure Forum held in Copenhagen, where Commissioner Cañete discussed major problems related to infrastructures and the EU Energy policy (23 May, here), two gas interconnections, corresponding to EU PCIs, receive financial support from the Connecting Europe Facility Programme. Specifically, the grant agreement for studies for the Gas Interconnector between Denmark and Poland (the Baltic Pipe) receives 33 million euros, while the connection agreement for the gas interconnection between Poland and Lithuania receives 276 million euros. The former is intended to enhance diversification of gas sources as well as increase competition, whereas the latter aims at ending the Baltic Sea region's isolation and integrating it into the European market (25 May, here).

LOOKING TOWARDS THE EASTERN MEDITERRANEAN...

- After Commissioner Cañete's attendance at the first ever EU-Egypt Sustainable Energy
 Forum in Cairo on 23 April 2018 (here), the European Union and the Arab Republic of Egypt
 sign a new Memorandum of Understanding on a strategic partnership in the energy sector
 for the period 2018-2022. Priorities focus on common challenges, including the need for
 deeper energy diversification and security of supply, as well as improvements in energy
 efficiency and in the use of renewables (23 April, here).
- The EU is backing the expansion of strategic energy storage in Cyprus, as the EIB confirms the 35 million euro loan to support the Vasilikos facility infrastructure (31 May, here).

...AND TOWARDS CENTRAL ASIA

Azerbaijan inaugurates the starting point of the Southern Corridor, 55 km southwest of Baku. The Sangachal terminal is now ready for its first commercial deliveries (29 May, here). New prospects concerning the Southern Gas Corridor also arrive from the potential use of Turkmen gas to supply Europe, as declared by Azerbaijan's Energy Minister. In his perspective, gas reserves in the country will need an expansion of infrastructures to reach Europe and if the country could tap into the Southern Gas Corridor, it could become an important player for the EU gas market (8 May, here). On the other side of the prospected pipeline, the new Italian environment minister Sergio Costa states he considers the Trans Adriatic Pipeline (the last stage of the Southern Gas Corridor, joining the Italian gas system) as "pointless". Likewise, the new Italian minister for the South, Barbara Lezzi, believes the TAP represents an excessive environmental danger (7 June, here). Should the Italian government decide to block the TAP, the last part of the Southern Corridor would not be constructed. Ironically, although the pipeline was conceived as a way to diversify European imports from Russian gas, Russia could be particularly interested in finalizing the project, to ship its gas to Europe by means of a connection between the Turkish Stream pipeline and the TAP, and could convince the Italian government to save it (22 June, here).



 Turkey, Azerbaijan and Georgia inaugurate the Trans Anatolian Natural Gas Pipeline (TANAP), a key section of Europe's Southern Gas Corridor (SGC) that will deliver around 6 bcm/y of Azeri gas to Turkey and 10 to Europe each year (12 June, here).

CROATIAN GAS IMPORT ASPIRATIONS AT A CROSSROADS

- Despite being on the agenda since the 1980s, the Liquefied Natural Gas (LNG) importing
 infrastructure is proceeding slowly. Funding and diplomatic engagement seem insufficient
 to push it forward faced with environmentalist and local council opposition (18 May, here).
- Meanwhile, the Croatian Parliament passes a special law concerning the construction of the floating LNG terminal, with 77 votes out of 151. The project's costs have indeed been cut to make it more profitable, and the EU is ready to contribute with more than 100 million euros (14 June, here).

2. Energy Market Evaluation: 6/12



Ongoing discussions are in place concerning the reinforcement of ACER, the EU Agency for the Cooperation of Energy Regulators, with different national positions within the Union and energy ministers merely agreeing on a general approach. Furthermore, the Commission pursues two main objectives at the market level: nuclear safety and decommissioning – to which it allocates 1,178 million euros within the 2021–2030 EU budget – and a stronger internal market in the South Eastern region, where improvements are recorded on the Bulgaria–Serbia and Greece–Bulgaria Interconnectors. Finally, the EU has settled a seven-year antitrust case against Gazprom and its dominant position in Central and Eastern countries.

DATA AND QUALITY OF THE EU ELECTRICITY & GAS MARKETS

- New statistics by Eurostat estimate that an amount of 13 TWh of electricity was not produced due to generation outages in 2016. Furthermore, approximately 600-850 GWh of electricity in the EU is not supplied to consumers each year. Another key element of the Eurostat valuation shows that disruptions resulted in an economic loss for consumers of approximately 10 to 25 billion euros annually in the period 2010 to 2014 (24 May, here). According to COGEN Europe, the amount of energy lost in producing and distributing electricity is 60% possibly reaching 75% for power plants running on biomass (12 June, here).
- The Commission releases the latest data on EU electricity and gas markets concerning the first quarter of 2018. For electricity, the Commission confirms that prices were relatively low, mainly as a consequence of abundant wind generation and mild weather, with the exception of February and March. In the months considered, nuclear energy from France which was previously taken off the grid was put back. Another element worth considering is that despite decreasing coal prices, the profitability of coal-fired generation further deteriorated in most of the continent (29 June, here).
- On the gas market, the report shows that consumption increased, following the tendency
 of the last three years. At the beginning of March the highest prices were registered, as a



consequence of harsh weather conditions that added demand as well as decreasing stock levels. Storage withdrawals reached record highs and proved to play a fundamental role (29 June, <u>here</u>).

WHAT ROLE FOR ACER?

- The future of the EU Agency for the Cooperation of Energy Regulators (ACER) is currently under discussion. The revision of the ACER regulation is part of the Clean Energy for All Europeans Package and is considered a fundamental step in times of increased market integration and variable electricity production, as it would provide EU Member States with further instruments to cope with energy supply crises and to guarantee the security of electricity supply given the intermittence of renewables (11 June, here).
- The bloc energy ministers agree on a "general approach" on the regulation, but a final step must be reached within the EU Parliament. Issues of sovereignty and the "unlimited competences" granted to the Agency are at the basis of debate among Member States. Indeed, the most discussed matter is the role of the Director (Article 25). Hungary, for instance, demands that the boards of regulators of the 28 MS will be able to amend decisions taken by the Director, while on the other side Spain and Sweden support a more unifying role for ACER, considered as a facilitator of European integration (12 June, here).

INTEGRATING THE ENERGY MARKET IN SOUTH-EASTERN EUROPE

- The European Commission contributes to the Serbian side of the Bulgaria-Serbia Interconnector with a pre-accession grant of 49.6 million euros. This project is classified as a PCI because of its several potential benefits in integrating and boosting the internal gas market: it will allow the development of a new route from Bulgaria to Serbia but also to other countries in South-Eastern Europe; in addition, it will allow LNG gas from Greece, Azeri gas from the SGC and offshore gas from the Black Sea (17 May, here.
- At the margins of the EU Council, Greek PM Tsipras and Bulgarian PM Borissov, in the presence of Jean Claude Juncker, sign a political statement concerning the need for rapid implementation of the Greece-Bulgaria Interconnector (IGB). They want its construction to begin by 2018 and to see it operational by 2020, coordinated with the first gas that will arrive from the Caspian region (29 June, here). The Commission Initiative on Central and South-Eastern European Energy Connectivity (CESEC) in its fifth meeting gives renewed impetus to the project, considering it a priority and important to enhance security of supply in the region. The Interconnector (a PCI) has already received 85 million euros of EU funds to date (29 June, here).

THE FUTURE OF NUCLEAR ENERGY

- The Commission proposes the allocation of 1,178 million euros in the next EU budget (2021–2027) to nuclear safety and decommissioning. The Union expects to provide help in particular to designated Soviet-era first generation nuclear reactors based in Lithuania, Slovakia and Bulgaria (13 June, here).
- Belgium fourth worldwide for the share of nuclear in the energy mix decides to shut
 down its seven nuclear reactors between 2022 and 2025. More investments are planned in
 renewable energy, wind farms in particular (3 April, here). However, the ambition to close
 nuclear plants by 2025 could instead create a major supply crisis, implying more gas to fill
 the gap (29 May, here).
- Six years after stopping the construction of a second nuclear power plant, Bulgarian PM Borissov announces the intention to revive the project (15 May, here). Also the Bulgarian



Parliament gives the green light on the Belene plant (7 June, here).

SUSTAINING STRATEGIC INFRASTRUCTURES

• The European Commission releases 500 million euros of funding for cross-border energy infrastructure in order to promote the EU internal energy market, enhance security of energy supply, and help provide clean, sustainable energy. To be eligible for application, projects must qualify as Projects of Common Interest (PCIs) – projects considered essential to complete the internal energy market and creating benefits for at least two countries (11 June, here).

MS & THE ENERGY MARKET

- Greece decides to launch an international tender to sell a majority stake of Hellenic Petroleum, the biggest Greek refiner (19 April, <u>here</u>). Furthermore, it agrees to sell a majority stake in the country's gas grid DESFA to Italy's Snam-led consortium (20 April, <u>here</u>).
- In Germany, while residential and industrial battery storage is moving faster, utility-scale battery storage is still going at a slow pace, despite its capacity having almost doubled in 2017. Important additional utility-scale battery storage projects are however under construction in the current year (27 April, here).
- Norwegian power producer Statkraft wants to bid for eight of the hydropower concessions (corresponding to 1,000 megawatts) that France wants to privatize, and which are currently operated by EDF (6 June, here).
- In an effort to expand abroad and have greater access to European, American and Brazilian markets, China's biggest renewable-energy developer China Three Gorges (CTG) offers Energias de Portugal SA (EDP) 9.1 billion euros as a bid price to buy a stock that it still doesn't own in EDP (14 May, here. As a response, EDP emphasizes the merit of the offer, but recommends shareholders not to accept the proposed price, calling instead for more details on CTG's strategic plans for the Portuguese Company (10 June, here).
- Despite Poland's attempts to block the updated EU-ETS system, the Court of Justice of the European Union rejects its bid. The EU had indeed decided to establish a market stability reserve (MSR) aiming at a gradual reduction of allowances on the market: this element is contested by Poland, which considers it goes against the Member States' domestic prerogative to decide on their own energy mix (22 June, here).

THE CHINESE SOLAR DEBATE

 Solar industries call on the European Union to end the Chinese minimum import price for Chinese PV cells as, according to SolarPower Europe, this move could create an additional 40,000 employment opportunities in the Union, in addition to the already existing 80,000 in the PV sector (28 May, here). In a letter to President Juncker, more than 250 organizations and businesses from the European Union also call for putting an end to the trade restrictions, anti-dumping and anti-subsidy tariffs that are set to expire in September 2018 (25 May, here).

Under the EU Merger Regulation, the Commission clears:

- the acquisition of part of Engie's LNG business by Total, both based in France (12 April, <u>here</u>);
- the acquisition of Eurogrid International CVBA by Elia System Operator N.V./S.A. (Belgium) (16 April, here);
- the creation of a joint venture between the two Finnish businesses Vapo and OP, a solution offering power and heat solutions to industrial operators, energy companies and municipalities in Finland and Sweden (16 April, here);



- the acquisition of joint control of NGT (from the Netherlands) which operates a subsea transportation system for natural gas – by StandardLifeAberdeen (UK), Neptune (UK) and Pension Danmark (DK) (19 April, here);
- the creation of a joint venture by SWO and BAG Netz, which have acquired joint control over NG Olching and Olching Verwaltungs, all from Germany (29 May, here); and
- the acquisition of Uniper by Fortum, both players in the generation of electricity, mainly active in Sweden (15 June, here).

Furthermore, concerning state aid, support measures and antitrust breaches in the energy sector, the Commission:

- starts an in-depth investigation to understand whether the support measures in favour of the Romanian National Uranium Company are in line with EU rules (8 May, here);
- decides that the exemption for certain large electricity users in Germany from the network charges applied between 2012 and 2013 is against EU State aid rules. Germany now needs to recover the illegal aid (28 May, here);
- concludes that two sets of tax rulings issued by Luxembourg have provided Engie with illegal benefits and an economic advantage as the company avoided paying taxes for almost a decade on most of their profits. The country must now recover around 120 million euros in unpaid taxes (20 June, here); and
- opens an investigation to examine the supply agreements between Qatar Petroleum companies exporting LNG and European importers in order to clear whether they have hindered the free flow of gas within the EEA in breach of EU antitrust rules (21 June, here).





3. Energy Efficiency Evaluation: 9/12



Policies in this dimension find a new momentum, with the long path for the revision of the energy efficiency directive (EED) that resulted in encouraging outcomes. Institutions in trialogue reached a deal on a target of 32.5% by 2030, with a revision clause by 2023. Similarly, the revised Directive on Energy Performance of Buildings (EPBD) is approved and will enter into force in the upcoming weeks. This dimension has largely benefitted from the EIB and EU funds, supporting the so-called "nearly-zero-energy buildings" and backing efficient transport in several EU Member States. The recent guide on energy-efficient investments launched by the Commission and Eurostat represents another sign of improved impetus on this dimension that frequently lags behind.

AMBITIOUS TARGETS

- The debate on the directive on energy efficiency (EED) has mainly focused around the
 consumers' role in energy savings, with clean energy campaigners struggling to draw
 attention to the so-called "primary efficiency" principle. However, differently from Member
 States, the Commission and Parliament seem well aware of this and conceive savings in all
 phases from energy production to transmission, and from distribution to consumption (8
 June, here).
- After some past attempts where the Parliament and the Council failed to find compromises on targets (14 June, here), an ambitious deal gets the green light from institutions in trialogue, agreeing on a 32.5% energy efficiency target by 2030. This includes as well a 0.8 % target of real annual savings for 2021–2030. The revised Directive contains a mandatory requirement for Member States to use a share of their efficiency measures to help vulnerable customers and those affected by energy poverty. An upward revision clause is foreseen for 2023, aimed at considering significant cost reductions from economic and technological changes. The Council and the Parliament will formally adopt the agreed text over the coming months (20 June, here).
- Despite several positive voices, some NGOs such as the European Environmental Bureau
 – argue that the target is not ambitious enough to achieve the Paris Agreement, and hope
 that in 2023 objectives will be raised significantly (19 June, here). Similarly, Green Group
 lawmakers warn the objective falls short of the global pledge to keep global warming below
 2°C (20 June, here).

PROMOTING ENERGY-EFFICIENT BUILDINGS

 The revised Energy Performance of Buildings directive is approved at the European Parliament, the first of the eight legislative proposals contained within the Clean Energy for All Europeans Package. MEPs indeed set a goal to reach "nearly-zero-energy buildings" in the EU by 2050, by improving the performance of new and old buildings, by promoting infrastructures for electric charging and by setting up national renovation strategies (17 April, here). Likewise, the Council approves the revised directive (14 May, here). The text is



then officially approved in June and will enter into force in early July, with Member States having 20 months to transpose the new elements of the directive into national law (19 June, here).

• The EIB provides 100 million euros to support two "nearly-zero-energy building" complexes in Copenhagen, Denmark. The project foresees six new buildings with a total of 660 new energy-efficient apartments (18 May, here).

SUPPORT TO LOCAL AUTHORITIES

- The European Commission Technical Assistance Facility, linked with the European Energy Efficiency Fund (EEEF), have supported, in 2017, 10 leading projects for a total of 194.4 million euros, helping public authorities of eight Member States to put in place sustainable programmes. These investments are expected to save around 26,701 tonnes of CO2 (4 May, here).
- Eurostat and the EIB clarify the treatment of energy efficiency investments, launching a new practitioners' guide aimed at helping and encouraging all involved stakeholders (public buildings, schools, hospitals, etc.) to invest in energy efficiency (8 May, here).
- The EIB disburses the first 85 million euro tranche of a 200 million euro loan to finance the modernization of Madrid's metro networks under the broader framework of the Investment Plan for Europe. The project is expected to improve energy efficiency and public service of the transport system (15 June, here).
- The EIB entered into agreement with the Spanish company Talgo to provide funds to improve safety and energy efficiency of high-speed trains and brand-new prototypes for electric trains (8 June, here).
- The EIB confirms 55 million euros to the city of Athens destined to projects related to transport, waste, energy efficiency in public buildings and urban rehabilitation schemes (20 June, here).



4. Decarbonisation Evaluation: 9/12



Developments on this dimension definitely prevail within the Energy Union. The alarming emissions increase registered is counterbalanced by important advancements on the Clean Energy Package and several initiatives at the Member State, European and multilateral level. The emissions pledge of the Union might indeed increase given the new targets reached, among them the 32% objective on renewables, a battled compromise among EU institutions. Other significant steps in the containment of emissions derive from advancements on the LULUFC and the Effort Sharing dispositions, as well as from new proposals and EU funds on clean transport and mobility. Recognizing the fundamental role of the private sector in pushing forward the energy transition by enhancing the sustainability and competitiveness of the EU economy, the Commission advances a strategy to multiply financial channels and simplify their participation. More public resources are similarly needed, according to the Commission, and it thus proposes to address around 25% of the EU 2021–2017 budget to climate-related purposes. At the Member States level, the case of Portugal reaching new heights in the production of renewable energy puts back on the table the urgency of better integrating peripheral regions, as the current situation risks isolating clean energy efforts.

EMISSIONS ON THE RISE

- Carbon dioxide (CO2) emissions from fossil fuel combustion see an increase by 1.8% in the EU in 2017 compared with the previous year. Differences persist among Member States, with stronger reductions in CO2 emissions in Finland and Denmark, and the largest increases in Malta and Estonia (4 May, here. In line with this tendency, several EU Member States are set to miss their emission target pledges as agreed on in Paris, according to CAN Europe. Among virtuous countries, the NGO lists France, Sweden, Portugal, the Netherlands and Luxembourg. Some, such as the UK, Belgium, Denmark and Germany, are no longer considered "at the forefront of climate change" because of their low ambition but relative wealth. The worst domestic emission policies are registered in Central and Eastern Europe (18 June, here). More bad news concerns the Emission Trading System (ETS), as in 2017 emissions reached 1.756 billion tonnes of CO2 equivalent, a rise of 0.3% compared to the previous year. This is the first time emission have risen in seven years. If airlines emissions are included, total EU-ETS in 2017 comes to 1.821 billion tonnes (increasing by 0.5%) (4 April, here).
- On the bright side, however, the circular economy package is now law (22 May, here), creating encouraging prospects by cutting in half industrial emissions from the steel, plastic, aluminium and cement industries by 2050 (May, here). In particular, a strengthening of the circular economy with greater recourse to recycling and reuse of resources could reduce EU industrial emissions by 56% in 2050 (5 June, here).

AMBITIOUS RENEWABLE TARGETS

• The new 2030 target for renewable energy is finally agreed on. The path has been long: the European Commission, Parliament and Council informally agreed on a compromise



target of 30–33% by 2030; the Bulgarian Presidency was in favour of 33% (8 June, here). The European Parliament had previously set the target at 35% (in January), contrary to Member States that agreed on a 27% target in December (31 May, here). In June, the new regulatory framework is finally approved, including a binding renewable energy target for the EU at 32% for 2030, and containing an upward revision clause for 2023 (14 June, here). The Council approves the deal reached on 14 June by the Bulgarian Presidency and the European Parliament, but an official endorsement is expected in October in the EU assembly in plenary and subsequently at the Council level (27 June, here). Key elements of the agreement concern the possibility of technology-specific support aligned with state aid guidelines; simplified granting procedures for MS; revised targets concerning renewables in the heating and cooling sector; obligations on fuel suppliers to enhance the share of renewables in the transport sector; EU-wide caps on conventional biofuels; efficiency criteria for biomass-based electricity production; and a new framework for household self-consumption (27 June, here).

• Together with the already recalled target on energy efficiency, agreed within institutions at 32.5% (20 June, here), Commissioner Cañete specifies that after the approval of the target on renewables, the European Union is in a position to potentially increase its emission reduction pledge from 40% to 45% (21 June, here).

STEPS FORWARD ON THE EFFORT SHARING, LULUCF & ETS DISPOSITIONS

- The Parliament and the Council approve two of the three pillars of the EU 2030 climate and energy framework, moving forward on the containment of emissions: the Effort Sharing Regulation and the LULUCF. As concerns the so-called "effort-sharing" regulation, the Parliament approves 30% cuts on CO2 emissions from sectors not covered by the EU-ETS (agriculture, transport, buildings and waste) across the EU, in order to deliver the 40% cuts of GHG emission from 1990 levels as accorded in Paris (17 April, here). The Council also approves the 2021–2030 emission reduction targets for Member States (14 May here). Secondly, the Parliament and the Council approve a text on LULUCF (Land-Use, Land-Use Change and Forestry) that promotes CO2 absorption by forests, with Member States committed to balance deforestation with equivalent afforestation or by improving their sustainable management (17 April, here, and 14 May, here).
- For the Emission Trading System (ETS), the framework regulating GHG emissions by major industrial companies and energy producers, the Commission presents the results of an assessment of all relevant sectors and sub-sectors exposed to the risk of carbon leakage, related to Phase 4 of the ETS system and corresponding to the period 2021–2030. The assessment foresees that 44 sectors qualify directly for the 2021–2030 carbon leakage list, and that another 12 sectors and 16 sub-sectors/products are eligible to apply for further assessment (8 May, here).

REVIEWING EU BUDGET PRIORITIES

• For the long-term EU budget 2021–2027, the Commission proposes to raise the level of ambition for climate financing across all EU programmes, with at least 25% of EU expenditure contributing to climate objectives. For LIFE, the EU programme for the environment and climate action, the Commission has proposed a funding increase of around 60% (1 June, here). Also within the Commission's legislative proposals on Cohesion Policy post-2020, a strong emphasis is placed on the low-carbon transition, considered a fundamental objective that Cohesion Policy should serve (29 May, here).



STRICTER RULES FOR EU CARS, LIGHT-AND HEAVY-DUTY VEHICLES

- Provisional data show that cars sold in 2017 emitted more than those sold in 2016. Since
 the monitoring began in 2010, this is the first increase in emissions. The average emission
 level for 2017 is around 118.5 grams of CO2/km (+0.4g compared to the previous year). 2017
 sees a decrease of diesel cars sold in the European Union (from 49% in 2016 to 45% in 2017),
 and a rise in demand for heavier petrol vehicles (23 April, here).
- The Environment Council backs a regulation proposal of the Commission which has the purpose of establishing a monitoring and reporting system for CO2 emissions as well as fuel consumption of new heavy-duty vehicles (25 June, here).
- Moreover, the Parliament approves new rules on car emissions, aimed at avoiding emission cheating. One of the main instruments is a new emission testing mechanism to assure that cars remain within the defined emission limits throughout their entire lifetime (19 April, here). Once the Council formally adopts the rules, they will be mandatory for all new vehicle models (20 April, here). In the meantime, the Technical Committee of Motor Vehicles (TCMV) agrees to the Commission's proposal to improve the car testing that became mandatory in September 2017 (4 May, here). The main innovations regard the rules on Real Driving Emissions and a new laboratory test procedure the world harmonized light vehicle test procedure (WLPT) (4 May, here).
- The ENVI Committee of the EU Parliament considers the draft report and amendments on the emission standards for cars and vans (light-duty vehicles). Among measures backed by the rapporteur (Miriam Dalli, Malta, S&D) are a revision of the car labelling directive and more ambitious reduction targets by 2025 and 2030 (20 June, here).
- The Netherlands is calling for higher emission standards for trucks, after having called on the Commission to come up with a more ambitious target on CO2 emissions for these vehicles. The country is joined by three other Member States (Ireland, Lithuania and Luxembourg) (17 May, here).

FAVOURING LOW-CARBON MOBILITY

- A new "InnovFin EU finance for Innovators" report states that innovative transport lacks between EUR 5.5 and EUR 13 billion in investments each year. The financing gap is heavier especially during the growth stage, particularly for companies that develop urban green mobility services and alternative fuel technologies. The report suggests standardized EUwide definitions and regulation of mobility services as well as financial support to promote the use of alternative fuels and sustainable mobility (19 April, here).
- A new communication on sustainable mobility is out and, in Annex II, a strategic plan for batteries is also included (17 May, here). The Plan builds on the work achieved by the European Battery Alliance and intends to allow for the production of as many batteries as possible in Europe, relying on material sourced from the EU territory (23 May, here).
- Despite opposition from environmentalists, the use of non-recyclable plastic in the production of transport fuel seems backed by some EU Member States (Finland, UK, the Netherlands and Czech Republic) and is debated in Parliament (8 May, here).
- The Commission updates the tyre labelling rules with an improved package of measures within low-carbon mobility. This aims at maximizing the label's contribution to the decarbonization of the transport sector (17 May, here).
- Ministers within the Transport Council support 3 initiatives of the Commission for clean and competitive mobility. This move allows for the opening of inter-institutional negotiations with the European Parliament (8 June, here).
- Ethanol plays a role in low-carbon mobility, as demonstrated by the fact that it delivered an
 average of more than 70% of GHG savings compared to fossil fuels in 2017 (27 June, here).



A CALL TO INCREASE AIR QUALITY

- Following several warnings, the Commission decides to refer seven Member States to the Court of Justice of the EU for not having respected agreed quality limit standards and not taking adequate measures to limit exceedance periods. The countries breaching EU rules on air pollution and/or vehicle types are France, Germany, Hungary, Italy, Luxembourg, Romania and the United Kingdom (17 May, here).
- The Commission releases a report "CleanAir Outlook" showing that if Member States
 fully apply policies on emissions, climate and energy, the number of premature deaths
 relatable to air pollution would be reduced by half by 2030. The analysis takes into account
 the measures contained in the National Emissions Ceilings Directive (NEC) (7 June, here).
- After welcoming the new agreement on international shipping emissions (13 April, here), the Commission releases a new compliance report showing that air pollution from sulphur oxides (SOx) emitted from ships has dropped, recognizing MS and industries for their successful results in implementing the Sulphur Directive. Stricter limits have more than halved emissions in the North and Baltic Seas, with a minimal economic impact (16 April, here).

WAR ON COAL

- Finland anticipates to 2029 its plans for a 2030 ban on coal as an energy source. As a
 mitigation measure for industries, the government announces a 90 million euro largescale subsidy scheme to reward companies and firms that abandon coal ahead of time (11
 April, here).
- After the UK government decision to switch off coal plants by 2025, the country seems
 ready to fill the energy gap with renewables, battery storage and flexible technologies
 instead of building new gas-fired power stations (14 May, here).
- In Germany, after the third rescheduling of the coal commission, a leaked document shows that the priority for the government seems the restructuring of coal-dependent regions rather than the reduction of CO2 (1 June, here). After several postponements, the commission responsible for the phase-out of coal is set up with a double mandate: protecting the climate and protecting jobs (7 June, here).
- Contrarily to the tendencies in other several EU MS, Greece lags behind in setting up an energy transition roadmap and plan to phase out coal and lignite (29 May, here).

BREXIT AND EU CLIMATE POLICY

Michel Barnier, the EU's chief negotiator for Brexit, says that a "non-regression" clause with the UK should prevent the reduction of pre-Brexit environmental standards (11 April, here). Also energy giants such as RWE, EDF and E.ON as well as several investors promote a "deep level of cooperation" between the two on energy and climate policies in post-Brexit times (24 April, here).

FINANCING DECARBONIZATION

• The Commission proposes a plan to support the private sector joining the fight on climate change. This new plan on Sustainable Finance is at the core of the EU Commission strategy to reach a cleaner and greener economy (24 May, here). Indeed, the EU tables a 'low-carbon benchmark' for green finance and a set of proposals aimed at boosting diversified private investments in low-carbon technologies (such as renewables) while increasing transparency in sustainable finance to avoid green-washing (25 May, here).



- The European Fund for Strategic Investments (EFSI) finances a large wind farm project in Aragón, Spain, lending 50 million euros to Forestalia Renovables. An additional 120 million is provided by the private sector (26 April, here). Furthermore, under the Investment plan for Europe, the EIB finances 29 turbines of a wind farm to supply over 50,000 homes in Ireland (23 May, here).
- Maroš Šefčovič calls for stepping up public-private partnerships (PPPs) to shorten the time
 to market clean technologies. According to the VP, public finance alone is not sufficient and
 it should be coupled with efforts by the private sector in order to achieve fast deployment
 at an industrial scale (23 May, here).
- EIB lends Energiepark Bruck 19.3 million euros for the "Bruckneudorf" and "Höflein West" wind farms projects. Erste Bank, which processed the funding, also contributes with 20.4 million euros (8 June, here).
- The Cohesion fund invests 45 million euros in the production of electricity from water and wind in the region of Madeira, Portugal, considered as an ultra-peripheral region (19 June, here).
- The EIB and Landesbank Saar sign a 70 million euro guarantee agreement to support the latter in investing in renewable energies in Germany and France wind and solar in particular. The EIB is able to cover these risks because it is supported by the EFSI Plan (25 June, here).

INITIATIVES & DATA FROM MS

- Data reveal that in the month of March, Portugal reached 100% of its power generation from renewables (mainly hydro and wind), producing an average of 103.6% from renewables: the country has however used fossil-power generated and imported energy during peak hours. Nevertheless, despite impressive levels of clean power generation, Portugal lacks sufficient interconnections with other European countries – at the very core of the Energy Union – due to its peripheral position (4 April, here.
- Sweden decides to tax passengers with extra fees for carbon emissions. Depending on their destination, they will be asked to pay between 6 and 39 euros (10 April, here).
- The Belgian government announces it will double the amount of its water dedicated to offshore wind farms, reaching 2.2 gigawatts by 2020 and 4 gigawatts by 2040 (24 April, here).
- Denmark reveals its intention to open the biggest wind energy park, 50 km out to sea, and big enough to power the country's seven biggest cities (24 April, here).
- The environment ministers of France, Germany, Sweden, the Netherlands, Finland, Portugal and Luxembourg call for quicker and more effective action at the EU level to reduce greenhouse gas emissions (26 April, here). Similarly, these Member States together with Belgium, Denmark, Estonia, Italy, Slovenia, Spain and the UK, a group of fourteen countries known as the "Green Group", asks the Commission to raise ambitions and adapt the EU climate pathway in line with the Paris Agreement (27 June, here).

JOINT EFFORTS: BRIGHT AND DARK SIDES

- The European Union and the African, Caribbean and Pacific states call for a full and effective implementation of measures to tackle global warming, in line with the United Nations Framework Convention on Climate Change and with the Paris Agreement (1 June, here).
- Following the launch of the Chinese emission trading system, the EU Commission and Chinese authorities hold the first policy dialogue: bilateral cooperation is crucial to exchange information, policy design, practices and views, considers DG CLIMA Director General (26 April, here).



5. Research Evaluation: 3/12



Although the Research & Development dimension struggles to be concretely and sufficiently addressed, specific tests and projects on new technologies are registered at both the public and private company level, by both Member States and European actors, in particular involving the exploitation of hydrogen. With the aim of become technology leader, France is particularly active on this front, launching its Hydrogen Plan, allocating 100 million euros and supporting demonstration projects.

FINANCING R&D

• 39 selected projects win funds of nearly 245 million euros under Horizon 2020 initiative to promote R&D in the transport industry, including sustainable mobility, smart electric mobility and resilience of transport infrastructure. A large part of the funding − around €200 million − is destined to 36 projects selected under Mobility for Growth, while the other three projects concern Automated Road Transport (14 June, here).

INNOVATIVE TOOLS

- Italian energy company ENI bids \$50 million in a nuclear energy project developed in collaboration with the MIT. The project aims at producing energy by fusing atoms at temperatures as hot as the sun. Casula, ENI's head of development operations and technology, sets the ambitious timeframe of 15 to 16 years to develop a commercial reactor (April 13, here).
- EU-funded DTOCEAN project develops new tools to design and analyse the cost-effective deployment of wave-powered tidal energy farms to provide decision-makers with more accurate information (7 June, here). Furthermore, the European Commissioner for environment, maritime affairs and fisheries Vella inaugurates a tidal plant in Cherbourg, France (14 June, here).

BATTERY MANUFACTURING AND STORAGE

- Vestas, the world's largest wind turbine maker, invests \$12 million in battery manufacturing in partnership with Swedish company Northvolt to promote R&D in the sector and acquire know-how from the automotive battery industry (April 4, here).
- Danish company Ørsted announces its commitment to its first venture in commercialscale battery storage with a 20MW project near Liverpool to provide increased grid stability to the UK's national grid (26 April, here).

EXPLOITING HYDROGEN'S POTENTIAL

• R&D on hydrogen is moving forward, in particular in the transport sector. Haskel Europe opens its first European research facility in UK to test H2 fuel cell vehicle components. The facility opens to provide an answer on the impact of hydrocarbon fuels on the environment and the related awareness. Increasing the use of H2 may deliver a fifth of the GHG emission cuts needed by 2050 to limit the impacts of climate change, according to a study published in November 2017, and in the UK alone H2 fuel cell vehicles could account for half of all



cars on British roads by 2050 (6 June, here). At Rungis, ENGIE inaugurates the largest hydrogen utility fleet in France and an alternative multi-fuel station that will be also be used to refuel electrical hydrogen hybrid vehicles (8 June, here). Furthermore, under the framework of the GRHYD project, the inauguration of a power-to-gas demonstrator with the injection of H2 into the natural gas grid takes place in France. The GRHYD initiative, supported by ENGIE, was launched in 2014 to reduce greenhouse gas emissions by 2020 and is an emblematic project of the Hydrogen Plan, launched by the government on 1 June 2018 (12 June, here).



- CEPS investigates the European Battery Alliance (EBA) initiative, and comments on the prospects for long-term success of the strategy, keeping an eye on the 2025 and 2030 policy goals of the Clean Mobility Package and other policies of the Union. The paper discusses, among other topics, the need for a well-balanced manufacturing strategy to ensure sustainable access to raw materials, an effective roll-out of charging infrastructures and investments in large-scale R&D programmes (27 April, here).
- The European University Institute explores the involvement of civil society in the process of designing and rolling out new interconnector projects. The factors that negatively influence public opinion are considered to range from diverging national energy interests and mismatch in the regulatory framework among Member States to asymmetric distribution of costs and benefits between stakeholders. Other elements considered are the lack of specific information about pros and cons together with poor involvement of local communities and the need for compensation measures at the local level (May, here).
- E3G considers how the post-2020 Multiannual Financial Framework (MFF) can accelerate a green transition in Central and Eastern Europe. Among key measures it considers a 40% increase in climate-related spending and the setting of dedicated programmes in the next MFF, tailored strategies, regional co-benefits, effective spending and facilitated access to funding (9 May, here).
- The Delors Institute explores the proposed European Union R&I (research and innovation) missions under the broader framework of Horizon Europe to evaluate their methodology and potential for success. Five key features are looked at and the paper concludes that the proposed R&I is adequate in content but needs additional political support and proper governance (29 May, here).
- According to Bruegel, the 2050 EU Climate Strategy does not consider recent technological
 and political changes as well as the Paris Agreement and in this sense must be reframed
 because compared to current opportunities, the Commission does not have the adequate
 power and investors might not sustain the low-carbon alternatives (20 June, here).





Alberto Pototschnig

Director / ACER

 Generally speaking, what are the critical elements of novelty brought about by the Energy Union?

I believe the main effect has been to give new impetus to the process of European energy market integration. When the Energy Union was launched it was more of a political statement; yet, shortly after, it has been filled in with the details of the strategies culminating in the Winter Package, the largest ever proposed by the Commission in the field of energy. Thus, I believe that the importance of the Energy Union so far has been to make energy an actual priority in the European Commission agenda. This is a fundamental step, particularly if we consider the number of challenges we are now facing in the energy sector, such as the sustainability agenda and the speed with which new technologies are entering the sector. In this sense, I believe it was positive to set such a path for the future.

• As director of ACER, how do you believe the regulatory framework has changed in the past ten years, and how has the agency evolved?

The change over the past years has been clear. When you integrate a market, the ambition and the geographical scope of regulation inevitably change. The best example is indeed the creation of the European single market for energy. Before ACER was launched and at its beginning, almost all regulation was done at the national level. The Agency was indeed established to help national regulators perform their task at the European level and, on this, it has supported the development of network codes, among other things. Yet it has become increasingly difficult to deliver regulation at a European level purely based on the competences of national regulators. Possibly the best example is the day-ahead electricity market coupling, which through multi-region coupling currently covers 19 jurisdictions and a geographical scope ranging from the strait of Gibraltar to the Barents Sea. Thus, the question arose if it was efficient for ACER not only to assist national regulators, but also to intervene directly in the decision-making process behind European regulation. Clearly, we need to bear in mind that national regulators have a part in ACER itself, because many of the decisions taken by the Agency require the favourable opinion of the Board of Regulators - which is composed by representatives of the different national authorities. However, generally speaking, in the past ten years regulation has necessarily taken a more regional and EU perspective, and so the discussion on the role of ACER has moved from providing a framework for the cooperation of national regulators, to a body which can take some decisions, also involving national regulators. And this debate has been finally included in the Winter Package.

The question which follows this debate is whether we need a EU regulator. There are issues that have already gone beyond the national level and therefore might be cumbersome for national regulators to deal with. For these issues, we might indeed need regulation delivered at the EU level. This is the case for wholesale markets or what we would call horizontal networks, which are high-voltage and high pressure networks, for instance. On the other hand, retail markets and consumers protection still require a national approach. The "dream" of the 1990s of having a European-wide retail market has not materialized yet, and these aspects require coordinated national regulation.





What do you think has been the impact of the Energy Union on ACER?

The process I just described started before the Energy Union strategy was developed – indeed, the market was supposed to integrate well before the initiative was launched. Nonetheless, the Energy Union has been confirming the trends that market integration has been following. The initiative is providing a useful framework where all the different pieces of the EU energy policy can move together. In the past we had the renewables package, the Third Energy Package; we had a significant number of pieces of energy legislation, speaking to each other but not necessarily part of the same framework. Through the Energy Union we are now benefitting from an improvement in the overall coherence, which is also working on the institutional side; the different European players increasingly appear as parts of the same story. In this sense, ACER is clearly included in this process, particularly in relation to the Winter Package, which featured a very ambitious proposal by the Commission, strengthening the role and independence of the Agency. This has still to be negotiated by the co-legislators, the European Parliament and the Council and, of all the legislative proposals made in the Package, those related to the electricity market design and to ACER will likely be among the last to be agreed upon. Also, regarding trialogue negotiations, significantly changing the role of the Agency will create and is already creating quite a lot of discussion at the Member State level. Yet, if approved, the impact of the Commission proposal could be quite significant. According to this proposal, the Agency might be given important responsibility in overseeing a number of EU-wide actors and processes.

• Interconnections have improved in the past years, but they still remain an issue for many European countries. Do you believe the troubles in linking Member States are related to infrastructure problems or perhaps due to a lack of political will to cooperate?

There are several perspectives regarding this issue. On the one hand, interconnections are actually improving. We are building more infrastructures and congestion is disappearing year by year, both in its absolute size and in its geographical extension. On the other hand, we have the rapid penetration of renewables, and demand is picking up again after the crisis. There is perhaps a need in some areas to strengthen interconnectors and build new capacity, but more importantly we have to enhance the way in which the already existing capacity is used, as sometimes a large part of it is not fully exploited. We would also benefit from a more efficient geographical structure of the market. At present, in most cases, market zones reflect political borders, and there is indeed some resistance to move to a better geographical market structure. Therefore, if you want to see a political dimension in such a story, this is likely where all the politics is.

How would you address this?

Even before the Winter Package a review of the structure of the electricity market was already envisaged. The first review study was delivered earlier this year, but it was inconclusive. TSOs were not able to find evidence that the current system is the best we can have, or that another would be better. As a clear conclusion was not delivered, no change was recommended – thus leading to no reforms so far. What we can do anyway is to address the problem through a different perspective: removing the discrimination between internal and cross-border exchanges. The Agency issued a Recommendation on this in November 2016, which was mostly reflected in the Winter Package. So we will see what the result will be of the negotiations on this.

Which direction do you think the EU external energy cooperation is taking?

From our perspective we can identity three areas marked by three different stages of cooperation. There are countries such as Norway, which are almost fully part of the internal market, and quite happy to accept EU rules. This is the highest degree of cooperation we can obtain. Then, we have



the Western Balkans and, generally speaking, the Energy Community contracting parties. Albeit to a different extent than Norway, there is spirit of cooperation and commitment to transpose EU rules, to be eventually part of the same market. This cooperation is also deepening as countries committed to implement and implementing the EU energy acquis could become observers in ACER. Montenegro is among those. Switzerland may soon be there as well. In a certain sense, here we are halfway in the cooperation: we are in the process of integrating and we will eventually fully integrate from a regulatory perspective (as we are already physically integrated with these countries). Finally, there is the Southern shore of the Mediterranean. The situation there is different, first for geographical reasons, as many of these countries are quite distant compared to the ones already listed. There is a potential for renewables and for structuring and expanding their market, but I do not see a possibility in the short term for them to be an integral part of the EU energy market – including closer countries which already trade with the EU, such as Morocco. I do not think the ambition should be a full integration here. Rather, we can focus on supporting them in developing their energy market, on trading energy with the EU when possible. There is space for cooperation, but the focus has to be different than for other areas of external energy cooperation.



Roadmap for the Energy Union

The items in this timeline have been listed by the Commission in the 2015 and 2017 States of the Energy Union. Items with a check mark (\checkmark) are the initiatives already taken by the Energy Union since the publication of the documents, and then approved by the Council and the Parliament.

18/11/15 State of the Energy Union

16/02/16 First Winter Package

30/11/16 Second Winter Package

01/02/17 Second State of the Energy Union

24/11/17 Third State of the Energy Union

Security of Supply

- ✓ Communication on the progress towards the completion of the list of the most vital energy infrastructures and on the necessary measures to reach the 15% electricity interconnection target for 2030
- ✓ Memorandum of Understanding on an upgraded strategic partnership with Ukraine
- ✓ Report on the European Energy Security Strategy
- ✓ Revision of the Regulation on security of gas supply
- Review of the Directive concerning measures to safeguard security of electricity supply
- 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 (beyond 2020)

Energy Efficiency

- Review of the Energy Efficiency Directive
- 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
- Review of the Directive on Energy Performance of Buildings
- Review of Regulations setting emission performance standards to establish post-2020 targets for cars and vans

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
 - Renewable Energy
 Package: including a
 new Renewable Energy
 Directive for 2030

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







WORLD ENERGY WEEK OCTOBER 8-11 2018. MILAN

The Energy Transition entails a wide variety of different financial, political, technological and corporate aspects, that must all converge on the scope of a more sustainable economic growth and energy sector. Multi-stakeholder dialogue is the way to fully comprehend and unlock the potential from the challenges ahead in the sector.

The topic of green financing is central, as massive investments from diversified channels are crucial to sustain a process which is still considered excessively risky. Several EU institutions – first of all the European Commission – are intensely committed to reorient capital flows towards sustainable investment as a way to achieve green and inclusive growth. Secondly, the application of blockchain, digital and innovative solutions to the energy sector is providing tools to envisage more decentralized systems and is set to provide beneficial impacts on industries and consumers such as reduced costs as well as greater efficiency and transparency. The European legal and regulatory framework is indeed evolving towards enabling such tools to be fully used and integrated into the energy market.

At the diplomatic and technical levels, the intensifying cooperation within the Euro-Mediterranean region and towards Africa is strategic to meet such challenges, and in particular those of energy security and accessibility. Italy is in this sense a major protagonist, both due to its geographical stance and privileged perspective, and for its active involvement within political and technical dialogues. Energy leaders and experts, together with major industry stakeholders will gather in Milan at the 2018 Energy Week (October 8–11, 2018), hosted by the Italian Member Committee. They will discuss critical innovation areas and new strategies to promote a sustainable supply and the use of energy for the greatest benefit of all. The special focus on the Italian Energy Day – where Italian business excellences will discuss best practices in terms of digitalization, resilient and "smart" energy systems, mobility and sustainable finance – will offer a deep insight into specific aspects of the energy transition in the Mediterranean region.

For all information and thematic meeting material please visit: https://worldenergyweek2018.org/
For registration: https://worldenergyweek2018.org/registration/

Who are we?

WEC Italy is a non-profit multi-energy association based in Rome, established in 1988 under the patronage of the Ministry of Foreign Affairs and the Ministry of Economic Development (<u>www.wec-italia.org</u>).

The Association is a supporting member and founder of the World Energy council (WEC), the foremost international multi-energy organization in the world today, accredited by the United Nations and Member Committees in close to 100 countries around the world (www.worldenergy.org).

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.

Updated 30 June 2018

About the IAI

http://www.iai.it/en/
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The Istituto Affari Internazionali (IAI) is a private, independent non-profit think tank, founded in 1965 on the initiative of Altiero Spinelli. IAI seeks to promote awareness of international politics and to contribute to the advancement of European integration and multilateral cooperation. Its focus embraces topics of strategic relevance such as European integration, security and defence, international economics and global governance, energy, climate and Italian foreign policy; as well as the dynamics of cooperation and conflict in key geographical regions such as the Mediterranean and Middle East, Asia, Eurasia, Africa and the Americas. IAI publishes an English-language quarterly (The International Spectator), an online webzine (AffarInternazionali), two book series (Quaderni IAI and IAI Research Studies) and other paper series related to IAI research projects.

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With the contribution of Francesco Paron, trainee at the IAI's Energy, Climate and Resources Programme

