






The road to implementation

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

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 December 2016 to February 2017 (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

“For all these reasons, the focus now turns to implementation”, declares the second State of the Energy Union, after giving a description of the activities of the Commission initiative and the energy framework for the EU. The declaration follows the idea of 2016 as the “year of delivery” for the Energy Union, expressed by Vice President Šefčovič on several occasions. Yet, it is not clear whether the initiative is ready for this step, and if it will be achieved.

The move towards implementation was not unexpected, being a natural consequence of the delivery of more than 3,000 pages in the second Winter Package, published in late November 2016. As the series of legislative proposals still have to undergo negotiations with the Council and the Parliament, and then be successfully implemented by Member States, the future of the initiative is far from being fully clear.

In this sense, the second State of the Energy Union is more of a presentation than an evaluation of the initiative, laying the groundwork for negotiation of the complex legislative Package. This process will take place at a complicated moment for the Union and in a domain—energy—in which national prerogatives have always been and are still strong.

While the State discusses the achievements of the Energy Union under all five dimensions, there are three aspects that the Commission is likely most interested to underline: the role of energy and climate diplomacy, the delivery of infrastructure for energy security and the empowerment of consumers—three sectors in which the Energy Union has indeed already made significant contributions.

Delivering successful energy diplomacy has been the flagship skill of VP Šefčovič, and this was proven by the action taken during all of last year, as in the case of Algeria and Turkey, as well as in the previous three months. Indeed, despite the still strong tensions in the area, it is Vice President Šefčovič who led partially successful negotiations among Russia, the EU and Ukraine during the periodic trilateral talks. The still-unresolved question of the doubling of Nord Stream 2 has again seen a strong involvement of the Vice President: even if the Commission cannot claim victory on the issue, the project remains blocked after the 2016 exit of the European partners, already a half-success for Brussels.

Climate diplomacy also witnesses an ongoing leading role for the EU. In face of uncertainty over the role of the US during the Trump presidency, the answer has been for the EU to reinforce its position on the global stage by, for instance, the declaration of the European Investment Bank (EIB) to invest 20 billion dollars a year to fight climate change over the next five years, and the strengthening of EU cooperation with China.

Good news on the delivery of infrastructures for energy security also supports the development of the Energy Union. A decrease in the expected costs of the Trans-Adriatic Pipeline (by 25%) diminishes fears about Russian competition in the exploitation of Central Asia and Eastern Mediterranean gas resources, whereas political support for the Kremlin on the part of local governments is stronger than ever. Furthermore, the deployment of interconnections in key, isolated regions (Baltic, Central, Eastern and South Eastern Europe) for gas and electricity in the past months addresses core demands by several Member States. This is a positive picture, counterbalanced only by the still-unresolved question of the Opal, the Nord Stream upstream pipeline.

Consumer empowerment is perhaps the major hope to create local support for the Energy Union among the citizens of Member States. Again, this was already in the Winter Package, being truly its central message; not by chance, the set of proposals was called “Clean Energy for All Europeans”. The concept is reiterated in the State, which also announces a second “Energy Union Tour”, a set of public events and meetings with stakeholders in all Member States, such as took place in 2015–2016. The State of the Energy Union also underlines the role of regions and cities when discussing “The importance of the local level for delivering the Energy Union”, a paragraph which also focuses on rural areas (a sector



of key importance for the EU, as some 40% of its budget is still allocated to agricultural policies). The idea here is to create a bridge between the EU and the Europeans, with the target of bypassing Member States in obtaining support from the electorate, also filling the gap which has always existed between the EU's policies and its citizens.

Despite these positive facts, there are still many doubts on how the ambitious and original project of the Energy Union will be achieved.

First, even the well-known climate leadership of the EU may not be balanced by a similar success in the domestic domain. The debate on the Emission Trading System (ETS) is far from over, its structure yet to be defined in a way that will avoid the market crash which lowered the carbon price almost to zero in the past years, maintaining it instead well above the current (and inadequate) 5 euros per tonne of CO₂. Coal consumption in countries such as Germany and Poland threatens both achieving the Paris targets and keeping a safe level of air quality—a problem the Commission has already addressed by tightening air pollution rules last December. Yet, the Energy Union has not been so prompt on the side of transport, with the dieselgate scandal still hovering, especially after the nomination of the allegedly involved Antonio Tajani as president of the European Parliament. On this matter, the Commission did not take action until December 2016, when it opened infringement procedures on car emissions against seven Member States.

The energy market also appears as another critical sector, due to its fragmentation. The issue here lies mostly in the lack of support by Member States for the Commission proposals, a fact which does not cast a positive light on the future of the Winter Package initiatives. In the past three months, for instance, the Commission has clashed with Member States over capacity mechanisms, whose final assessment and future definition was indeed proposed in the Winter Package. While some Member States are opposing the prioritization of cross-border trade over the national markets, doubts are cast on whether the Commission's proposal will lead to subsidizing inefficient coal plants in several other European countries.

What appears clear here is that the Commission still lacks the coordinating power and the domestic grip to achieve the ambitious project which was presented in the Energy Union Communication of February 2015. The Winter Package and the State thus mirror this deficit, as does the action of the Energy Union in the past months. Indeed, on the one hand it seems to have obtained significant successes if compared to the often-failing European energy policy (such as increasing the 27% energy efficiency target to 30%). On the other, the Energy Union appears unable to make the necessary leap towards a greater vision for a truly common energy policy, which could also and hopefully extend to other sectors.

In this respect, it is interesting to note that the greatest ever initiative for European energy policy has been proposed immediately before the beginning of an extremely delicate year for the Union, which will witness key elections in France, Germany, the Netherlands and perhaps even Italy, as well as the very likely triggering of Article 50 by the UK. Even if all this could presumably paralyse action in the energy sector, there is also a chance that this sector will be the first to answer the need for change many are expressing towards the EU, through the novelty and level of ambition of the Energy Union project. This is an outcome which only the resolution and courage of the Commission and the Member States can determine.



Five Guiding Dimensions Details of the evaluation

1. Security of Supply Evaluation: 9/12



As anxieties about the Trump administration's energy policy continue to surface, security of supply remains central in the Energy Union debate. Indeed, concerns over Russian gas flows shape the European Commission's energy diplomacy agenda, while diversification efforts continue. Brussels keeps negotiation channels open with Russia and Ukraine in the framework of the trilateral talks and lifts the cap on the use of the Opal pipeline by Gazprom, but at the same time strengthens cooperation with Kiev in order to enhance the country's energy autonomy and resilience. The EU's attempts to diversify its gas sources proceed, as demonstrated by the competition to book capacity on the Interconnector Greece-Bulgaria (IGB) or by the positive developments registered by the TAP pipeline, the realization costs of which are expected to decrease. The EU's external energy action is coupled with attempts to streamline cooperation and solidarity at the internal level, a precondition for any sound energy security policy: more coherent regional dialogue, and in particular increased involvement of the European Commission in the signature of Intergovernmental Agreements, are among the recipes identified by Member States.

THE RUSSIAN PIPELINE WALTZ CONTINUES

- The trilateral talks between Russia, Ukraine and the EU continue in Brussels, attended by the Ministers for Energy of Russia and Ukraine, Alexander Novak and Ihor Nasalyk, as well as representatives of Naftogaz and Gazprom, and presided over by Maroš Šefčovič (9 December, [here](#)).
- The European Court of Justice (ECJ) accepts the Polish appeal over the European Commission decision of the 23rd of October to lift the cap on Gazprom usage of the Opal pipeline. It has thus suspended the execution of the decision, which allowed the company to use up to 90% of the transmission capacity of the pipeline carrying gas from Nord Stream (23 December, [here](#)). VP Šefčovič explains the complexity that characterizes the Nord Stream project, initially conceived as a project of common interest in 2009, highlighting that further cooperation was undermined by the Russian side (30 January, [here](#)).
- Despite an early hesitation, Gazprom's plan to improve its capacity and influence in the Baltic Sea obtains the acquiescence of Sweden. Officials in Karlshamn municipality express a positive tendency towards the agreement, considering use of the local port not to be a threat to national security (30 January, [here](#)).
- Cooperation between Ukraine and the Commission continues, as Ukraine's energy regulator publishes a proposal for storage rules in the country, following consultations with the Commission. New rules are aimed at improving the use of gas storage, half of which was not booked last year, and guaranteeing increased stability and transparency for both customers and operators (16 February, [here](#)).



EARLY FEARS ON THE TRUMP ADMINISTRATION

- Commission Vice-President Maroš Šefčovič stresses that, despite possible American protectionist measures, the Union will be able to manage future developments in the energy market. Even if heavily reliant on energy imports, opportunities will not be missed for diversification, reducing dependence, and increasing efficiency. In this context, G7 and G20 could represent the chance to lighten financial burden and improve investment efficiency (27 January, [here](#)).
- On the occasion of the meeting between German Chancellor Angela Merkel and American President Donald Trump, European Member States raise suspicions and concerns over possible suspension of sanctions against Russia by the American administration. The potential effects of this move on Eastern Europe's energy security are still unclear. (28 January, [here](#)).

THE SOUTHERN GAS CORRIDOR

- The Trans-Adriatic Pipeline, which represents the most western section of the Southern Gas Corridor, announces a 25% reduction on its initially expected cost of 6 billion euro. The Shah-Deniz consortium expectation is to see the European Bank for Reconstruction and Development, the European Investment Bank and other agencies of the OECD involved in financial support for the project (6 February, [here](#)).
- Gazprom plans to enter the Southern Gas Corridor game, with the company's deputy head Alexander Medvedev announcing Gazprom will consider pumping gas through the TAP. In fact, through the so-called Open Season auctions, any interested gas supplier will be allowed to bid to supply the pipeline's additional 10 bcm capacity (15 February [here](#)).
- The realization of the Turkish Stream gas pipeline advances, as Gazprom signs its second contract to realize the infrastructure with Swiss contractor Allseas Group, for the construction of the second string, a total of 900 km which Gazprom stated will be built using Pioneering Spirit, the world's largest construction vessel (20 February, [here](#)).
- Azerbaijan leaves the Extractive Industry Transparency Initiative (EITI), a group which aims to foster accountable and clear exploitation of mineral, oil and gas resources, after its membership was suspended over concerns on limitations of civic freedoms in the country. The status of Azerbaijan was already downgraded from "compliant" to "candidate" country in April 2015, but it reacquired its full membership in October 2016 (10 March, [here](#)).

THE FUTURE OF THE EASTERN MEDITERRANEAN

- During a meeting in Rome, the 43 energy ministers of the Union for the Mediterranean (UfM) agree to further increase energy cooperation in the area. This will be accomplished through the three UfM energy platforms and focusing on a set of priorities delineated during the meeting, such as capacity building, interconnections development and innovative financial mechanisms (1 December, [here](#) the press release, [here](#) the joint declaration and [here](#) Commissioner Cañete speech)
- Greek, Cypriot, Israeli and Italian high rank officials meet in Brussels to discuss financial and operative details on the East Med pipeline and to prepare the forthcoming meeting among energy ministers of the four countries (23 January, [here](#))
- Eni signs a deal in Cairo to sell 10% of its stake in the Zohr gas field, which has 850bn m³ as total gas potential, the largest discovery in the area so far and a potential driver for the development of the East Mediterranean gas resources (13 February, [here](#)).



CONTRASTING SIGNALS FROM THE DOMESTIC SIDE

- The European Commission highlights that gas prices have been falling by 50% since 2013, and oil prices by 60% since 2014, for the benefit of EU energy security. (2 December, [here](#)).
- As gas production keeps falling in the Netherlands, especially in the Groningen field and numerous other small fields, a collapse of the gas sector cannot be excluded, especially due to the impact of energy transition policies. Russian energy supplies represent the most direct solution to this situation, exposing the country—and the EU as a whole—to growing energy dependence on Moscow (7 February, [here](#)).
- Canadian company Ithaca Energy announces it has successfully started operations on its North Sea oil field “Stella”. The reserve is forecast to produce 16,000 barrels of oil equivalent/day, doubling Ithaca’s current production in the region, which is facing an opposite trend of decline and closure of fields due to decreasing resources and high production costs (17 February, [here](#)).
- The European Commission’s brokers manage to settle a dispute between Spain and Portugal on the matter of nuclear waste and energy interconnectors, the so-called “Almaraz case”. Spain will share with Portugal all relevant information for the development of the Almaraz nuclear waste disposal site, to guarantee that it will not affect Portuguese territory (21 February, [here](#)).

AGREEMENT AMONG MEMBER STATES ON SOS

- The Council decides to focus future efforts on regional cooperation to reduce risks for the EU’s gas supply and promote exchange of information and solidarity among Member States. As the dialogue between the Council, the Commission and the European Parliament proceeds successfully, provisional agreement is reached on a number of topics. (5 December, [here](#)).
- The proposal for a review of the Intergovernmental Agreement Decision receives the endorsement of European institutions. According to the new procedure, Member States cannot sign Intergovernmental Agreements until the Commission has issued its opinion. These will be subject to a mandatory ex-ante compatibility check by Brussels (7 December, [here](#)).
- The Council approves conclusions regarding energy cooperation with non-EU Western European countries, Norway, Iceland, Liechtenstein, Andorra, Monaco and San Marino. In regard to Norway, the Council recognizes its contribution to the energy market implementation, considering that is still a reliable supplier of gas and oil for the EU, despite not having fully implemented the Third Energy Package and the Offshore Safety Directive (13 December, [here](#)).

2. Energy Market

Evaluation: 3/12



The EU's path towards establishing a unique and integrated energy market is still arduous, due to the fragmented approach of Member States, whose policies are strongly driven by national interests and priorities. The establishment of capacity mechanisms in the electricity sector is among the key points at issue: this is why the Commission is calling for a sectoral adequacy assessment, aimed at evaluating whether remunerations are actually needed (and justified) to ensure sufficient capacity at the national level. Due to the limited compliance of Member States with EU market rules, the Commission continues to keep a close eye on State aid and competition policies, as demonstrated by the unannounced inspections in the Greek electricity sector carried out by Brussels officials. Positively, the energy sector is among the investment priorities identified both by the Juncker Commission and Member States, as proved by the 444 million euro CEF financing for the realization of 18 energy infrastructure projects.

CLASHES OVER THE FUTURE OF CAPACITY MECHANISMS

- The Commission allows a scheme to ensure sufficient electricity capacity in Southern Germany (known as Network Reserve) as a temporary measure until June 2020. In the future, Germany will implement measures for better congestion management by the transmission system operators, in order to remove the necessity for the Network Reserve (20 December, [here](#)).
- The Commission proposes an adequacy assessment in order to reduce capacity mechanism effects of keeping open electricity plants that should otherwise leave the market. In particular, Brussels fears that capacity mechanisms would just translate into subsidies for coal power plants (22 December, [here](#)).
- Czech Minister of Industry and Trade Jan Mládek casts doubts on the benefits generated by various capacity mechanisms implemented across Europe (i.e. Germany and the UK), pointing out that - as a last resort measure in cases of resource inadequacy - they have to be market-based, technologically neutral and open to cross-border participation. The European Parliament is about to start negotiations to make the internal electricity market work across the whole EU. (2 February, [here](#)).

CLOSE EYE ON STATE AID AND COMPETITION

- In Denmark, energy-intensive users will be compensated up to a maximum of 85% for their collaboration in financing renewable energy development, as the European Commission declares this scheme valid under EU State aid rules (12 December, [here](#)).
- In Germany, Berlin and Munich district heating areas are allowed to receive a premium of €1.5 cent/KWh for a maximum of 16,000 operating hours, while new installations in the Düsseldorf and Cologne district heating areas are entitled to a premium of €3.4 cent/KWh for a maximum of 30,000 full load hours. The European Commission supports these four highly efficient cogeneration plants that will contribute in terms of CO₂ emission savings and primary energy savings (14 December, [here](#)).
- According to the Commission's 2014 Guidelines on State Aid for Environmental Protection and Energy, the Belgian offshore renewable energy scheme does not alter the competition



in the Single Market and will ensure more green electricity (8 December, [here](#)). As well, the Commissioner in charge of competition, Margrethe Vestager, affirms that the amendments to the German EEG law ensure the largest renewable support schemes in the EU, based on auctions. Germany may then organize separate auctions for different renewable energy technologies to balance its electricity system (20 December, [here](#)).

- The Commission raids the offices of companies in the Greek electricity sector, in a series of unannounced inspections on suspicions of abuse of dominant position within the country (14 February, [here](#)).

EMPOWERING INTERCONNECTIONS

- Five offers are presented to book capacity on the Interconnector Greece-Bulgaria (IGB): companies interested include three stakeholders in the project—BEH, Edison and DEPA—as well as Austria's OMV, Greece's Gastrade, US Noble Energy and Azerbaijan's SOCAR. The project will supply from 3 to 5 bcm/y of gas to the Bulgarian market, diversifying the country's gas portfolio (5 December, [here](#)).

BOOSTING INVESTMENTS

- The Council, in its Economic and Financial configuration (ECOFIN), considers that progress on improving the investment environment is still insufficient. The shortcoming identified by the Council and provided to the Commission concerns the Energy Union, the Capital Markets Union, the Single Market Strategy for Goods and Services, the Digital Single Market Strategy and the Better Regulation Agenda, as well as the Circular Economy package. The Council invites the European Investment Bank to cooperate on the Investment Plan for Europe, and match the work of the Economic Policy Committee (6 December, [here](#)).
- The Juncker Commission presents the creation of a Circular Economy Finance Support Platform. There is not a fixed amount of investment expected; however, the Juncker Plan already showed positive signs, as it increased by €116 billion in investment in its first year, as reported by the Commission in September 2016 (26 January, [here](#)).
- According to Maroš Šefčovič, the expansion of the Juncker Plan could help in raising the amount of capital in renewables, as the EU is willing to encourage and increase investments in the sector, despite a fall by half since 2011. The Commission maintains that to meet climate and energy targets, new funds will have to be released to achieve the €379 billion requested annually (1 February, [here](#)).
- EU Member States agree to invest 444 million euros for 18 energy infrastructure projects, financed under the CEF facility and involving interconnections, renewables integration, smart grids and gas projects (17 February, [here](#)).

STRONGER COOPERATION AMONG MEMBER STATES NEEDED

- As harsh weather conditions hit both Bulgaria and Romania, the latter refuses a request for help from the former. A peak of 7,700 MWh in Bulgaria, linked to inefficiency of electricity distribution and higher power consumption, was matched by similar issues in the other country, leading to the request being turned down, as stated by Romania's Energy Minister Florian-Toma Petcu (10 January, [here](#)).
- The Final Report for the Fitness Check aims to provide evaluation to support the Energy Union framework strategy. The work contains measures of the overall administrative burden of EU energy law reporting and planning obligations. In addition, it evaluates the degree of coordination and tries to identify any lack of information (February, [here](#)).



3. Energy Efficiency

Evaluation: 3/12



There have been no major developments in the energy efficiency domain during the trimester. In the second State of the Energy Union, the Commission highlights progress made at the EU level, but does not propose new major initiatives to boost European action in the sector. A relevant exception is the launch of a new database on the EU's building stock to monitor the energy performance of buildings across Europe. The building sector is particularly relevant to strengthen the EU's efficiency policy, and the initiative witnesses the Commission's attention to this issue.

- The EU Building Stock Observatory, through a project launched by the European Commission, is starting to collect and processing information on buildings' characteristics, in order to enhance energy efficiency performance (6 December, [here](#)).
- Marie Donnelly, Director for Renewables and Energy Efficiency at the European Commission, stresses the importance of demand-side management to enable the energy transition in Europe, highlighting that the new energy sector will benefit from market digitalization and further integration among industries and small businesses (9 December, [here](#)).
- The Commission's Vice-President Maroš Šefčovič, during his presentation of the second Report on the State of the Energy Union, puts great emphasis on progress in the energy efficiency domain, calling for the support of business leaders and civil society (in particular cities and mayors) in order to improve overall performance (1 February, [here](#)).

4. Decarbonisation

Evaluation: 6/12



Despite its ambitious international action, domestic difficulties—such as the malfunctioning of the Emission Trading System (ETS)—prevent the EU from fully embracing successful decarbonization policies. The revision of the ETS, driven also by a relevant stimulus to discussion offered by the European Parliament, has occupied a relevant part of the European internal debate on decarbonization in the last trimester. The transport sector, particularly the automotive, maritime and civilian aviation segments, is another key subject for emissions reduction, as the use of renewable energy sources remains insufficient. The inadequacy of policies to reduce the impact of transport (as witnessed by the final warning sent by the Commission to Germany, France, Spain, Italy and the UK for breaching nitrogen dioxide limits) also affects the levels of air pollution, an issue tackled by the National Emissions Ceiling Directive reform presented by Brussels. Importantly, the global success of all these initiatives, and of the fight against climate change in general, is challenged by the conservative approach of the new US presidency. The risk is well understood within the EU, which is trying to establish new strategies and alliances to cope with this novel situation.

REFORMING THE ETS

- In its proposal for revision of the EU Emission Trading System (EU ETS) post-2020, the Commission aims to provide effective support for innovative projects in energy intensive sectors through the creation of an Innovation Fund. To ensure a rapid start of the fund, DG CLIMA is already addressing a consultation process with ETS stakeholders and financiers (16 January, [here](#)).
- Following the October 2016 agreement by the International Civil Aviation Organisation (ICAO) to decrease international aviation emissions via a Global Market-Based Measure (GMBM), the European Commission issues a proposal to review the EU Emissions Trading System (ETS), in order to adequately address the sector. The Commission plans to maintain the current geographical framework of the ETS, including in the Scheme all flights between airports in the European Economic area (3 February, [here](#) the press release and [here](#) the full Regulation proposal).
- As discussed in the European Parliament, the involvement of the United Kingdom in the Emission Trading System cannot be taken for granted post-Brexit, even though the country's carbon price floor was created to work in conjunction with the ETS scheme. Various solutions have emerged through parliamentary debate, among them the possibility for the UK to be politically out of the Union but included in the scheme, in parallel to Iceland, Lichtenstein and Norway (9 February, [here](#)).
- A greater reduction in ETS carbon credits (2.2% a year) is backed by the European Parliament, which supports a Commission proposal that also entail the doubling of the capacity of the market stability reserve (MSR). The reserve will be launched in 2019 to absorb excessive allowances in the market and avoid a market crash such as undermined the EU emissions market in the past (15 February, [here](#)).



STRENGTHENING THE EU ENVIRONMENTAL LEADERSHIP

- The implementation of the 2030 Climate and Energy Framework is listed among the legislative priorities for the EU set by the Council for 2017, in harmony with the Paris Agreement and the “Clean Energy for all Europeans” package (13 December, [here](#)).
- At the panel session during the Arctic Frontiers conference in Tromsø, Norway, Commissioner Vella’s speech focuses on the impact of the EU in improving efforts to counteract Arctic ice warming. EU funding programmes remain an important tool for governments as well as regional and local authorities for future investments in this direction (23 January, [here](#)).
- The resolution adopted by the Foreign Affairs and Environment committee of the European Parliament recognizes that the Arctic sea ice has diminished significantly since 1981, threatening to release huge amounts of carbon dioxide and methane into the atmosphere. A strong policy on Arctic cooperation is thus stated as essential for the EU, as the Arctic is particularly susceptible to climate change effects and is constantly threatened by the race for natural resources. (31 January, [here](#)).

TRANSPORT AND THE CLIMATE OF THE FUTURE

- The Executive Director of the European Environment Agency, Hans Bruyninckx, states that European countries are performing well in meeting 2020 targets. However, he also identifies some exceptions, such as the transport sector, where the use of renewable energy sources remains insufficient (1 December, [here](#)).
- The European Commission decides to take action against seven Member States (Czech Republic, Germany, Greece, Lithuania, Luxembourg, Spain and the United Kingdom) that have disregarded EU vehicle type approval rules. Commissioner Elżbieta Bienkowska, responsible for Internal Market, Industry, Entrepreneurship and SMEs, stresses the important role of Member State national authorities in charge of guaranteeing compliance to the European law on the part of car producers (8 December, [here](#)).
- After a work session which lasted ten months, the Committee of Inquiry into Emission Measurement in the Automotive Sector completes its draft recommendations on car emissions. The role of the Commission and Member States—before and after the car emission test cheating scandal—emerges as crucial in dealing with the issue and preventing fraud (19 December, [here](#)).

FIGHTING AIR POLLUTION

- The Commission tightens air pollution rules through the reform of the National Emissions Ceiling Directive, as a consequence of the dramatic data of more than 450,000 people estimated to have died prematurely from air pollution in the EU. The implementation into national legislation for each Member State is expected by 30 June 2018. The Directive concerns corrective action to reduce major air pollutants such as primary particulate matter (PM), sulphur dioxide (SO₂), nitrogen oxides (NO_x), ammonia (NH₃), and volatile organic compounds (VOC) emitted from solvents (14 December, [here](#)).
- The Commission sends a final warning to five Member States (Germany, France, Spain, Italy and the UK) for repeatedly breaching nitrogen dioxide (NO₂) air pollution limits. These emissions are mostly the result of road traffic, and the breach occurred in a number of areas ranging from 3 (Spain) to 28 (Germany) (15 February, [here](#)).



CLIMATE IN THE TRUMP ERA

- The president of the European Investment Bank, Werner Hoyer, underlines the commitment of the institution against climate change, remarking its opposition to climate deniers. The EIB will continue to invest around 20 billion dollars a year to face climate change, for a total of 100 billion dollars over the next five years. This decision is in contrast with the path that the United States is likely to follow under the new presidency of Donald Trump, who considers the Paris Agreement too expensive for the American industry (24 January, [here](#)).
- The EU is looking to strengthen its cooperation with China on climate change, as Climate and Energy Commissioner Cañete is supposed to pay a visit to China at the end of March, likely offering European expertise to build a cap and trade system in the country (1 February, [here](#)).
- Vice President Šefčovič openly speaks against the climate-denying declarations of the Trump administration, offering as examples of the phenomenon the increase in extreme weather events which have hit the US in the past years, and stating that the EU will keep leading the fight against climate change despite Trump's scepticism (1 February, [here](#)).

TRADE AND DECARBONISATION

- Following the rejection of Member States of the extension of existing trade duties on Chinese solar panels for a further 2 years in January 2017, the Commission has scaled back its proposal to 18 months for both anti-dumping and anti-subsidies measures, also including a progressive phase out for the two (8 February, [here](#)). Meanwhile, the General Court of the European Union, the second highest in the EU, rejects the appeals of 26 companies which challenged the 2013 Commission decision originally imposing the trade duties on Chinese solar panels (28 February [here](#), [here](#) the press release)

5. Research

Evaluation: 3/12



Despite declared recognition for its importance in positive transformation of the energy sector, research remains one of the most neglected dimensions of the Energy Union. The magnitude of EU initiatives in key sectors such as digitalization and smartization is nowhere near great enough. Despite the reduced amount of action to be reported during the trimester, the strong link between sustainable energy and circular economy identified by the Commission deserves attention, as highlighted in the Report on the implementation of the Circular Economy Action Plan published in January.

A DIGITALE FUTURE

- The new secretary general of ENTSO-E, Laurent Schmitt, affirms that some digital applications for interconnection will produce better outcomes in cooperation across EU countries in the internal energy market (18 January, [here](#)).
- Requests for smart grids, storage and smart city funding under the Horizon 2020 umbrella totalled 773 million euros in 2016. The evaluation process will be completed in July 2017 (15 February, [here](#)).

NEW SOURCES OF ENERGY

- The EU Action Plan for the Circular Economy includes new guidance recently published by the European Commission. The work focuses on the generation of energy from waste, also through anaerobic digestion (26 January, [here](#)).
- The EU is successfully performing drilling activities inside an Iceland volcano, located on the Reykjanes peninsula. If fully successful, the project financed by Horizon 2020 could provide a source of geothermal energy and increase efficient energy production (2 February, [here](#)).

INVESTIGATING CLIMATE RELATED RISK

- The JRC research team published a report in January including a selection of high-resolution climate projections and simulations, and evaluating the frequency and magnitude of river floods and their expected impacts under future scenarios. There are three main scenarios, corresponding to 1.5°C, 2°C, and 4°C global warming. The results elaborated show a strong positive correlation between future flood risk at the global scale and atmospheric warming (27 January, [here](#)).



- Bruegel publishes the Policy Brief "Climate policy in China, the EU and the United States: Main drivers and prospects for the future". The document analyses the key factors affecting both the development and the implementation of climate policies in these three main areas. For China, the key driver of climate policies is represented by the strategic importance of building a low-carbon economy. While for the EU energy security and economic concerns are important in promoting renewable energy industry, in the US there is a major polarization of the political debate on the issue (6 December, [here](#)).
- CEPS produces a paper on lessons learned from the POCACITO stakeholder consultation process, recommending that the EU, Member States and cities focus on adapting governance models in post-carbon European cities. In order to help cities to meet voluntary commitments and favour transition to sustainable and resilient urban living, a monitoring and evaluation system has to be established (16 December, [here](#)).
- E3G develops a new report in collaboration with the Energy System Catapult on building a long-term industrial strategy undertaken by the government of the United Kingdom, which plans to promote a clean energy transition (5 January, [here](#)).
- The think-tank Climate Analytics states that the European Union will likely fail in its action against carbon emission if it retains a consistent number of carbon-based industries until 2030, as coal use is falling by only 1% a year. Empirical evidence on the behaviour of states such as Germany, which is postponing its coal phase-out plans, supports this study (10 February, [here](#)).



Christoph Frei

Secretary General, World Energy Council

- **Since Germany first used the term “Energiewende”, the idea of the energy transition has taken many different shapes; what is your definition for this process? Is it the same concept or idea that is being designed at the EU level?**

The World Energy Council often refers to the Grand Transition that is already taking place in the energy sector. The Grand Transition is driven by three fundamental driving forces: decarbonization, new business models arising from digitalization and technology innovation and resilience against new risks such as cyberattacks, extreme weather events or energy–water nexus.

As such, it is not only limited to the change in energy production and consumption portfolio as “Energiewende” is, but also takes into account the changes that have been brought by digitalization and automation, technology developments and consumer empowerment, among other factors. So the Grand Transition concept involves a much wider spectrum of developments that are already influencing the energy sector.

The political will to continue and to drive decarbonization is weaker today than when the EU Emissions Trading Systems (ETS) was introduced. The common regulatory framework that it takes to positively shape the Grand Transition is at risk of being undermined by national interests. We are only at the early stages of coping with risks such as cyberattacks in an effective way.

- **What are the main challenges the EU will face while addressing the energy transition (social, economic, industrial, political)? And what are the opportunities?**

The European energy system is the most integrated energy system in the world. One of the main challenges is to find a common market design that would work in all EU countries. Without a uniform market model it would be difficult to guarantee swift and long-term operations of such an energy market. Most energy leaders today agree that energy markets need regulatory adjustments in order to deliver long-term goals, but the means to be used seem to vary for policymakers and stakeholders.

A second key challenge arising from the transition are the EU's potential stranded investments in supply assets and transmission infrastructure. Interests of invested pension funds have to be balanced with commitments on the climate side and the necessity to embrace innovation.

A related challenge is stranded resources (first with countries supplying coal and, later, oil) and shifting economic dependencies, which will require carefully and transparently managed relationships, or will potentially result in loss of trust.

In an ever more competitive world with economic growth and labour market challenges, the EU must maintain and develop its institutional strength and innovation capability. Weakened institution, infrastructure and education systems will lead to a negative spiral with low Trilemma



performance and growth perspective, as is described in our “hard rock” scenario.

- **Has the Energy Union changed the European energy policy and, if so, in what ways? How is the Energy Union enabling the approach of the EU (and Members States) towards the energy transition?**

A new political mindset is clearly there—the five dimensions of the Energy Union provide a logical sequence for policymakers to move forward. Each of these dimensions has been addressed with different initiatives by the Commission, and the political debates about the best ways forward currently taking place.

However, it is a difficult process and will require “transition management”: the ability and strength of energy policymakers to incentivize coordinated changes will define the degree of success of the Energy Union.

- **Of the five dimensions of the Energy Union, where do you believe the EU has made the most relevant progress, and where can its action be improved?**

Climate action has so far been the biggest success: the Paris Agreement is the cornerstone for a common worldwide policy towards climate change, and the role of the EU in achieving this agreement cannot be underestimated. Now policymakers have to deliver the incentives for implementing the changes. From the Council’s scenario analyses we have concluded that it requires very efficient international cooperation in order to get closer to the targets set. However, in today’s world this seems to become increasingly difficult.

In other dimensions relevant progress depends on the new “Winter Package” that has been recently introduced by the Commission and is currently under scrutiny by the Member States. The devil is as always in the details: the EU has to find a way not to overregulate markets in order to also provide room for innovation. It is a delicate debate.

- **For Europe, energy cooperation with its neighbours is increasingly important but more and more complicated, as in the case of the North African countries or Turkey. What could be the recipe for a successful European external energy policy?**

Energy policy is always part of overall economic policy and ultimately must serve a prosperity objective. Our scenarios oppose an inward-looking and fragmented approach in favour of an approach that enables innovation and encourages sharing of most effective technologies by enabling trade; an approach that uses resources effectively through regional integration; as well as an approach that delivers a climate framework that is supported by all.

The former leads to less secure, dirtier and more expensive energy in an overall less prosperous Europe. The latter depends on all our commitment to deliver practical solutions on trade of green goods & services, climate framework and real projects that cross borders.

- **Does the EU risk losing its leadership in global decarbonization and energy transition policies? What could be the implications of this situation for the security and welfare of Europe’s citizens?**

The speed of the energy transition, falling solar prices, increasing shale supply, shifting market realities, growing e-vehicle shares in some countries, the nature of new business models ranging from rural entrepreneurs to energy efficiency contractors and to prosumer empowering energy



blockchains, has surprised many in the industry. Regions with less infrastructure lock-in may be able to leapfrog and become the new leaders in defining new energy realities.

Currently Europe is well on track with new policies. However, the challenge for the EU will be to effectively manage the energy transition with a permanent focus on the balance between secure, sustainable and affordable energy. Without the commitment to lead Europe will fall back and eventually lose competitiveness.

WORLD ENERGY COUNCIL

Executive Assembly
08–11 October 2018
Milan, Italy

Between 8-11 October 2018, Italy and the City of Milan will host the Executive Assembly of the World Energy Council.

The Italian candidacy supported by the Italian Minister of Economic Development, Carlo Calenda, has been welcomed by the World Energy Council community that really appreciated the link between the legacy of post-EXPO Milano 2015 mobilizing international leaders and decision-makers to work together on the nexus between energy, sustainability, food and resources for life, and WEC flagships activities promoting “sustainable energy for all”.

The Executive Assembly is the most important event organized by WEC after the triennial World Energy Congress. The Assembly combines meetings of the WEC constituency (institutions, organizations, academia, companies and experts coming from all energy sectors and belonging to almost 100 National Committees) with the World Energy Leaders’ Summit – WELS, an high level meeting gathering Ministries, institutional representatives and CEOs involved in closed doors energy dialogues.

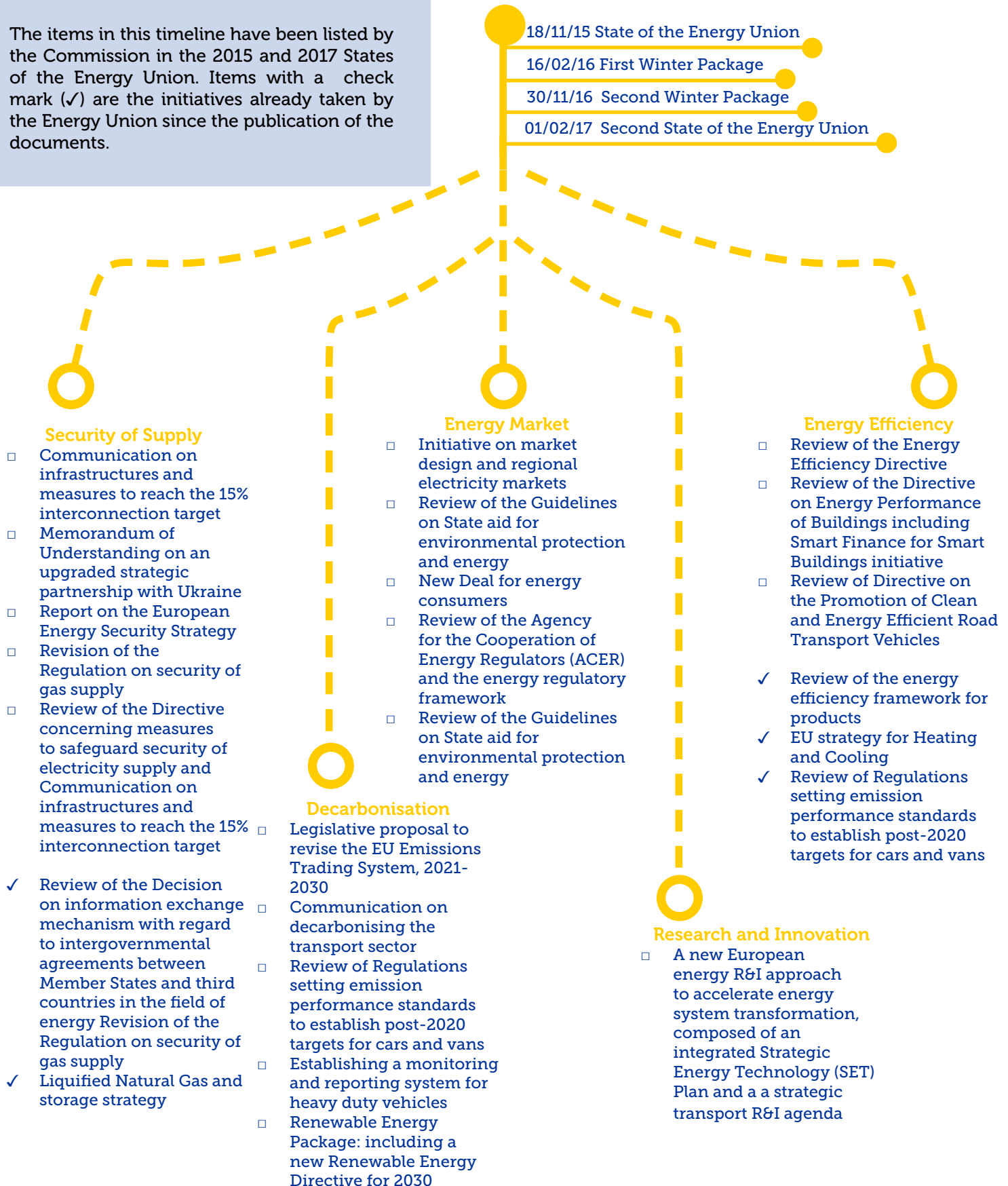
The WEC 2018 EA in Italy will be a great opportunity to foster energy cooperation, security and sustainability in the interconnected energy space between Central Asia, the Middle East and Africa. In particular, the macro-themes proposed for the 2018 WEC Assembly are 1) the international energy dialogue fostering the security and resilience of energy systems within Euro-Mediterranean and African countries 2) disruptive and innovative technologies that are pushing the energy sector in the energy transition and the role of start-ups 3) the need for a diverse energy leadership (culture, gender, skills) able to address fast and complex trends linked to the energy transition 4) the green finance, innovative mechanisms able to support the deployment of sustainable energy solutions for all.

The WEC 2018 Executive Assembly framework will definitely provide institutions, companies, academia and energy experts with an important occasion to work together for more integrated, affordable and sustainable energy systems for the greatest benefit of all people.

Arrivederci a Milano!

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 (✓) are the initiatives already taken by the Energy Union since the publication of the documents.





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 and 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/>

 @IAIonline

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 (AffariInternazionali), two series of research papers (Quaderni IAI and IAI Research Papers) and other paper series related to IAI research projects.

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With the contribution of Anna Rita Ceddia

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