AN ENERGETIC TRANSATLANTIC ENVIRONMENT

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Abstract. This paper aims at investigating the evolution of the transatlantic cooperation in the post-Cold War period, focusing on the energy and environment sectors, mainly from a European perspective. To this end, both qualitative and quantitative methodology instruments have been resorted to: secondary data analysis, discourse analysis, interpretation of statistical data. Comparing and contrasting between the EU and the US perspectives, as well as between the three European Commissions' approaches (Barroso, Juncker and von der Leyen), we have determined the EU's growing ambition to consolidate its specific policies, its interdependences and divergences with the US on matters of common concern.

Keywords: transatlantic cooperation, LNG, interconnection projects, GHG emissions, Paris Agreement

Introduction

"U.S.—EU energy cooperation has a win-win history. Many challenges remain, and opportunities to build business ties abound. We should seize them", Douglas Hengel, a former U.S. foreign service officer and Senior Fellow at the German Marshall Fund of the United States remarked back in 2017 (Hengel, 2017).

The EU and the US account for the two greatest energy consumers at global level and they do share the responsibility to react with a joint approach to constantly growing challenges on energy security. Generally speaking, the European Union and the United States shared a common vision on the need to promote open, transparent, competitive, and sustainable global energy markets, and have been cooperating in the energy sector and on environmental issues for many years.

"Whatever the Trump Administration decides to do about the Paris Agreement, the climate agenda is not going away", Hengel argued. "Presidents Bush and Obama both found it useful to shape the international climate framework working with our European partners, despite our differences on approaches. Europe will want to keep the United States engaged on climate as much as possible, and it is not in the U.S. interest to be isolated on this issue. So despite our differences, there will be strong incentives for the United States and EU to work together on a structure that allows continued forward movement on global climate engagement" (Hengel, 2017).

In the wake of global challenges, we uphold the opinion that transatlantic cooperation on energy and environment is significantly needed nowadays, as it has been for decades. Bilateral agreements and high-level EU-US forums have tried to shape the two partners' strategic directions and impose concrete action plans to address the evolution of climate and sustainable energy trends.

With a visible desire to "lead by example", EU policies developed and perpetuated (or enhanced) over the years have managed to propel a strong European pillar

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within the transatlantic alliance, with notable aspirations for both its own member states' progress on sensitive topics like energy and environment and the multilateralism-driven wellbeing and economic prosperity of its global partners and the world at large, as we speak here of cross-border issues, bearing a visible impact on future generations.

1. Premises of Transatlantic Cooperation

1.1. Transatlantic energy cooperationThe EU-U.S. Declaration "Initiative to enhance transatlantic economic integration and growth" (Washington, June 20, 2005), adopted at the June 2005 EU-US Summit, signaled that "one of the greatest needs for developing countries today is to provide the basic energy services necessary to lift their citizens out of poverty". The Parts have acknowledged "the important potential that can result from further efforts" and pledged "to cooperate to promote sound energy policies, improve energy security and foster economic growth and development".

As stated in the document, targeted activities fell in the following areas of common action, among others: promoting energy efficient policies and the use of renewable energy sources to help developing countries reduce poverty by working closely with them in this regard, as well as deploying advanced, efficient, affordable energy technologies to help meet their energy needs; working together through the Carbon Sequestration Leadership Forum to foster the development and deployment of clean, efficient technologies, especially in key developing economies, as global reliance on fossil fuels, particularly coal, continued; promoting work on hydrogen technologies and the International Partnership for the Hydrogen Economy; cooperating to ensure the continued safe operation of existing nuclear generation and to exchange experience on nuclear safety measures and control; continuing research to advance all forms of renewable energy, and to promote the use of renewable and energy efficiency technology and policy measures (Council of the European Union, 2005: 11-12).

In 2006, the US and the European Community have agreed to renew their agreement on the energy efficiency labeling of office equipment products using EPA's ENERGY STAR, signed in 2001. It was one of the accomplishments of the first EU-US informal economic ministerial meeting (on the 30th of November 2005) following up on the commitments made during the June summit in Washington.

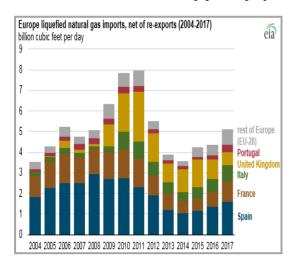
The renewed version of the Accord continued to cover office equipment including computers, monitors, printers, copiers, fax machines, and scanners, with other products possibly added in future years (Energy Star, 2006). It has expired on February 20, 2018.

Besides considering enhancing bilateral relations with actors like Russia, China, India, or developing new ties with Central Asian producers like Turkmenistan and Uzbekistan and the African countries, the EU International Energy Policy Priorities as of 2007 mentioned "the scope of relations with partners like the US should continue to cover areas like promoting open and competitive global energy markets, energy efficiency, regulatory cooperation and research" (Commission of the European Communities, 2007: 23-24).

The 2008 EU Energy Security and Solidarity Action Plan, delivered by the European Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions, included among its priorities comprehensive infrastructure projects, aimed at interconnecting EU member states, providing "transparent and reliable framework conditions within the EU and with respect to third countries so that business will be able to take up new investment opportunities" (Commission of the European Communities, 2008: 4).

Developing a Baltic Interconnection Plan covering gas, electricity and storage, as well as a southern gas corridor for the supply of gas from Caspian and Middle Eastern sources and North-South gas and electricity interconnections within Central and South-East Europe were considered on the Commission agenda for the coming years and will have been reiterated by President Barroso and his successors in Brussels as key elements in the EU energy policy. Engaging with third countries like Azerbaijan and Turkmenistan, Iraq and Mashreq countries or Uzbekistan and Iran had been proposed in the 2008 Commission's Communication for the medium and longer term (Commission of the European Communities, 2008: 4-5).

Considerable efforts of all involved parties to finance such projects and a closer and collaboration with the private sector and financial institutions, notably the European Investment Bank and the European Bank for Reconstruction and Development, was deemed indispensable to promote the necessary financing for cross-border initiatives, especially if considering the EU response to the financial crisis (Commission of the European Communities, 2008: 6). We will explore further a concrete example of this kind, as we will discuss the BRUA pipeline project in the next subchapter.



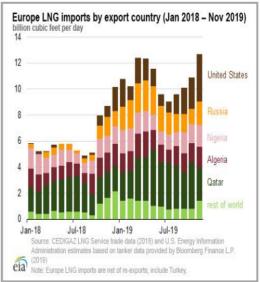


Fig.1.1.1.a Europe liquefied natural gas imports, in bcf/d (2004-2017)

Source: U.S. Energy Information Administration, imports based on International Group of Liquefied Natural Gas Importers (GIIGNL) Annual Reports, 2005–2018

Fig.1.1.1.b. Europe LNG in bcf/d (Jan 2018-Nov 2019)

Source: CEDIGAZ LNG Service trade data (2018) and US Energy Information Administration, based on Bloomberg Finance LP (2019)

Future energy cooperation with the BRICS and African countries did not exclude the US from the EU's vision to deepen and promote a common view on global energy security, to improve the transparency of global energy markets and to address the issue of sustainability (Commission of the European Communities, 2008: 9). Though admitting that "Russia will remain the EU's main energy partner far into the future", particularly important for Member States overwhelmingly dependent on a single gas supplier at that time was also the perspective of LNG imports and adequate storage capacities (Commission of the European Communities, 2008: 8). "LNG terminals and ship-based

regasification in the EU should be available all throughout the EU", to meet the member countries' specific needs, the Commission proposal noted (Commission of the European Communities, 2008: 5).

The figure below (Fig.1.1.a) depicts the evolution of LNG imports into the EU, from 2004 to 2017, with an overall ascendant tendency between 2004 and 2009. In 2011 they reached a peak of 8 bcf/d and they will have gone mostly up since then until the end of 2019 (some variations can be seen in Figure 4.1.1.b). The first US LNG delivery to Europe came no sooner than April 2016, when a single cargo entered Portugal (Cornot-Gandolphe, 2016: 24).

1.2. Environmental aspects

Concerning environmental policies, through the 2020 climate & energy package, the EU has committed in 2007 to the goal of the "20-20-20" initiative: reducing greenhouse gas (GHG) emissions by 20%, increasing the share of renewables in the energy consumption to 20% compared to 8.5% today and improving energy efficiency by 20%, all by 2020. These goals were also headline targets of the Europe 2020 strategy for smart, sustainable and inclusive growth (European Commission, 2020).

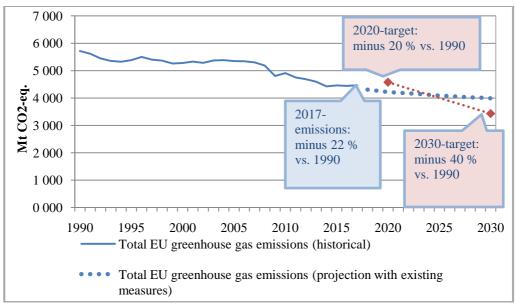


Fig..1.2.1. Total EU GHG emissions (historical emissions 1990-2017, projected emissions 2018-2030) (Mt CO2 eq.) and GHG reduction targets.

The EU has overachieved commitments made under the Kyoto Protocol (entered into force on 16 February 2005) to reduce emissions by 8% over the first commitment period 2008-2012, compared to the 1990 base-year level, as well as over the second commitment period 2013-2020. The EU has reached its 2020 target six years earlier than projected, managing to reduce emissions by around 22% between 1990 and 2017 (covering emissions from international aviation, but not emissions and removals from land use, land-use change and forestry), according to a European Commission assessment (European Commission, 2020). Targets for GHG emissions reduction will have risen during the next European Commissions' mandate, as displayed in the figure below.

The US has never ratified the Kyoto Protocol.

2. Transatlantic Cooperation Between 2009-2017

2.1. Energy cooperation

"The economic and financial crisis and the scientific evidence of climate change have shown us that we need to invest more in sustainability", José Manuel Barroso assessed in his 2009 Political Guidelines (Barroso, 2009: 21). With a vision for a more sustainable Europe by 2020, the EU global leadership in fighting climate change was expressed in the Guidelines, as he defined the Europe he believes in Barroso pledged for "promoting energy security, while helping European technology and European companies to pioneer the development of a low carbon economy", which can provide huge opportunities.

Tackling climate change and putting sustainable energy policies in place was deemed as requiring European and global solidarity, as "our interdependence, inside Europe and worldwide, has never been clearer", he added. Moreover, "good interconnections will be crucial to power future growth", Barroso opinionated, an idea which remained constant in the Juncker Commission too.

The creation of the EU-US Energy Council in 2009 has helped enhancing transatlantic energy cooperation. The Council is now chaired by the EU High Representative for Foreign Affairs, the EU Vice-President for Energy Union, the EU Commissioner for Climate and Energy, the US Secretary of State and the US Secretary of Energy. A representative from the rotating EU Presidency also takes part in bilateral sessions European Commission, 2020). The Council was set to meet annually, alternately in the EU and US, and report to the EU-US Summit. The most recent official encounter took place in Brussels on 12 July 2018, as the first Energy Council during the Trump Administration.

Within the Council work was going to be structured in working groups of senior officials from both sides, focusing on the following specific areas: Energy Policies, Global Energy Security and Global Markets, and Energy Technologies Research Cooperation (European Commission, 2009).

As the founding document reads: "The EU-US Energy Council will provide a new framework for deepening the transatlantic dialogue on strategic energy issues such as security of supply or policies to move towards low carbon energy sources while strengthening the ongoing scientific collaboration on energy technologies" (European Commission, 2009).

Concrete actions that the partners have envisioned included: supporting stable, reliable and transparent energy markets, particularly in oil and gas and electricity supply, modernization of existing infrastructures and diversification of energy routes and sources, increasing energy efficiency, promoting security of transit and key energy infrastructures to improve energy security at regional and global level, deepening ongoing joint work on new and renewable technologies, deepening collaboration on nuclear energy, supporting sustainable development of biofuels and biomass, developing technologies for carbon capture and storage, strengthening cooperation on international energy policy while prospecting bilateral energy relations with third countries, encouraging energy efficiency and low-carbon energy use in developing countries and examining ways to promote partnering between US and European companies and investors in green and sustainable technologies European Commission, 2009).

As the table above depicts, between 2007 and 2012, EU hard coal imports from the US (% of extra EU-28 imports) have been on an ascendant curve, reaching their maximum level in 2012 (22, 9%). Since then, they have declined visibly until 2017, when values rose again up to almost 17 %. Russia has been the largest hard coal supplier to the EU for the last

decade, while the United States had been the third main supplier of hard coal imports to the EU-28 in 2017.

					(ba	Hard co					
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	201
Russia	25.2	26.1	31.1	27.4	26.7	26.2	30.0	31.0	29.8	30.7	38.9
Colombia	11.8	11.9	16.4	18.7	21.3	22.2	19.4	19.8	22.2	21.1	16.9
United States	9.7	14.7	14.3	17.6	18.6	22.9	22.3	20.5	14.7	13.2	16.9
Australia	14.2	12.5	7.9	11.3	9.4	8.0	8.5	7.2	11.2	16.3	11.8
South Africa	20.2	16.8	15.6	9.8	8.3	6.6	6.1	7.9	7.4	5.3	49
Indonesia	7.8	7.2	6.7	5.5	5.1	4.6	3.3	3.7	4.0	3.4	3.4
Canada	3.3	2.8	1.5	2.1	2.3	1.8	2.0	2.9	1.7	23	2.5
Mozambique	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.4	0.5	0.8	1.2
Kazakhstan	0.1	0.3	0.2	0.2	0.3	0.3	0.3	0.6	0.6	1.0	0.7
Others	5.1	5.5	4.2	3.5	4.0	3.0	3.1	3.6	2.4	2.5	2.4
	124-67	73410	21140	****	44650	Crude oi		3.0	2.4	2.3	2,4
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	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Russia	33.7	31.8	33.6	34.7	34.7	33.6	33.7	30.4	29.0	31.9	30.3
Norway	15.0	15.0	15.1	13.7	12.6	11.3	11.8	13.1	12.1	12.5	11.4
Iraq	3.4	3.3	3.8	3.2	3.6	4.1	3.6	4.6	7.6	8.3	8.2
Kazakhstan	4.6	4.8	5.3	5.5	5.7	5.1	5.7	6.4	6.6	6.8	7.4
Saudi Arabia	7.2	6.8	5.7	5.9	8.0	8.8	8.7	8.9	7.9	7.8	6.6
Nigeria	2.7	4.0	4.5	4.1	6.1	8.2	8.1	9.1	8.4	5.7	6.4
Iran	6.2	5.3	4.7	5.7	5.8	1.3	0.0	0.1	0.0	2.9	5.2
Libya	9.7	9.9	8.9	10.1	2.8	8.1	5.6	3.3	2.4	23	5.2
Azerbaijan	3.0	3.2	4.0	4.4	4.9	3.9	4.8	4.4	5.2	4.5	4.5
Others	14.6	16.0	14.4	12.7	15.9	15.6	17.9	19.6	20.7	17.4	14.8
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415 Long	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Russia	38.7	37.4	33.0	31.9	34.4	34.9	41.1	37.4	37.7	39.8	38.7
Norway	28.1	28.5	29.7	27.9	27.6	31.8	30.4	32.1	32.1	25.1	25.3
Algeria	15.3	14.7	14.1	13.9	13.1	13.3	12.6	12.0	10.8	12.5	10.6
Qatar	2.2	2.3	5.9	9.7	11.6	8.4	6.5	6.8	7.7	5.7	5.2
Nigeria	4.6	4.0	2.4	4.0	4.4	3.1	1.7	1.5	2.0	2.0	2.5
Libya	3.0	2.9	2.9	2.7	0.7	1.9	1.7	2.1	2.1	1.3	1.1
Peru	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.5	0.3	0.5	0.9
United States	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
Trinidad and Tobago	0.8	1.7	2.0	1.4	1.2	0.9	0.7	0.9	0.6	0.3	0.3
Others	7.3	8.5	99	83	6.9	5.0	4.7	6.7	6.6	12.9	PARISON I

Fig.2.1.1. Main Origin of primary energy imports, EU-28, 2007-2017 (% of extra EU-28 imports) **Source**: Eurostat, https://ec.europa.eu/eurostat/documents/3217494/10165279/KS-DK-19-001-EN-N.pdf/76651a29-b817-eed4-f9f2-92bf692e1ed9

Imports of US natural gas were inexistent until 2016, when they amounted to 0.1 %, rising to 0.4 % in 2017 (Eurostat, 2019).

European Commission's President Jean-Claude Junker's Political Guidelines (15 July 2014) read: "Current geopolitical events (n.n. the Ukraine crisis) have forcefully reminded us that Europe relies too heavily on fuel and gas imports" (Juncker, 2014).

One of the former Juncker Commission's priorities (2014) underlined the need "to reform and reorganize Europe's energy policy in a new European Energy Union. We need to pool our resources, combine our infrastructures and unite our negotiating power vis-à-vis third countries. We need to diversify our energy sources, and reduce the energy dependency of several of our Member States. I want to keep our European energy market open to our neighbors. However, if the price for energy from the East becomes too expensive, either in

commercial or in political terms, Europe should be able to switch very swiftly to other supply channels. We need to be able to reverse energy flows when necessary" (Juncker, 2014).

In his 2015 State of the Union speech, President Juncker reminded that the European Commission "has been working with the countries of Central and South East Europe in designing the networks that will guarantee gas supply in case of disruption of imports", while also upgrading "the Baltic Energy Market Interconnection Plan to bring the electricity grid of that part of the EU closer to the European markets thereby strengthening the energy security of the Baltics" (Juncker, 2015).

Interconnectivity projects among EU member states continued to be promoted by the European Commission (e.g. Estonia, Latvia, Lithuania and Poland/ Bulgaria, Greece, Hungary, Austria, and Romania), as pointed out in the 2016 State of the Union speech, with a focus on energy security aspects, to minimize interruptions to supply. As infrastructure is critical, the EU leaders have adopted 195 European projects of common interest that benefit from accelerated planning and simplified regulation, and are eligible for financial support (Juncker, 2016).

To give an example, the strategic aim of diversifying gas supply sources and routes as an alternative to the Russian production had been and is currently addressed by the comprehensive infrastructure project called ROHUAT/BRUA, denominated after the initiating European countries: Bulgaria, Romania, Hungary and Austria. BRUA was launched as a concept in the second half of 2013, when the former NABUCCO was deselected as the route preferred for the Caspian gas transmission to the Central European markets, and it accounts for a strong example of Romania and the EU developing its own internal potential in the field of energy.

The BRUA project aims at developing the gas transmission system capacities between the interconnections of the Romanian gas transmission system and the similar ones in Bulgaria and Hungary, consisting in the construction of a new transmission pipeline to connect the Technological Node at Podişor to the Horia gas metering station (GMS).

Ensuring adequate gas transmission capacities at the cross-border interconnection points between Romania and Bulgaria and between Romania and Hungary bears the potential to increase interconnectivity at European level, with the Black Sea gas resources reaching broader Central-European markets.

BRUA was included on the updated list of Projects of Common Interest published in November 2017 as an Annex to EU Regulation 347/2013 and on the list of priorities of the CESEC (Central East Europe Gas Connectivity).

The two implementation phases envisage: the development of the transmission capacity in Romania from Podişor to Recaş, including a new pipeline, metering station and three new compressor stations in Podişor, Bibeşti and Jupa -6.24.1-2 in the Third PCI List /2017-BRUA Phase 1 and the expansion of the transmission capacity in Romania from Recas to Horia towards Hungary up to 4.4 bcm/a and expansion of the compressor stations in Podisor, Bibeşti and Jupa -6.24.4-4 in List 3 PCI/2017- BRUA Phase 2. The completion of Phase 2 (a commercial one) depends on the procedure for capacity booking at Csanadpalota IP and on the timeline of this procedure.

On top of that, this second phase could enable extracting gas from the Black Sea and transporting it on the Romanian and other European markets, provided the concessionaires of the specific offshore perimeters (Exxon Mobile-US and OMV Petrom-Austria) decide to make this investment and initiate the drilling procedure (incentivized by a friendly Romanian legislation in this field). In order to facilitate this procedure, the Romanian gas transmission operator, Transgaz, has set up the goal of constructing a 308.3

km Tuzla-Podişor telescopic gas transmission pipeline to connect the gas resources available at the Black Sea shore and the BRUA corridor, thus enabling gas transmission to Bulgaria and Hungary through the existing interconnections, Giurgiu – Ruse (with Bulgaria) and Nădlac – Szeged (with Hungary). Commissioning (start-up) of the Tuzla-Podişor pipeline is

due 2022.



Fig.2.1.2. The interconnection points of the Romanian gas transmission system with the similar Bulgarian and Hungarian systems

Source: Transgaz, https://www.transgaz.ro/sites/default/files/Art.2%20engleza_11.pdf

Besides the company's own financial resources invested in the project, the EU has supported BRUA with a grant of around € 180 million (40% out of the total eligible costs amounting to € 478.6 million) for the construction of the pipeline, through Connecting Europe Facility. For the design of the three compressor stations, a Financing Contract was signed with Innovation and Networks Executive Agency (INEA) for a grant in the amount of 1.519.342 EUR (50% of the total estimated FEED costs for the compressor stations). Additionally, loans from European financial institutions (EBRD and EIB) have been contracted. (Transgaz, 2020). BRUA Phase 1 was due to be finalized by October 1, 2020.

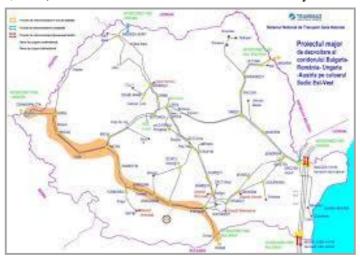


Fig.2.1.3. Map of the key development project of the Bulgaria-Romania-Hungary-Austria Corridor – Phase 1

Source: Transgaz, https://www.transgaz.ro/sites/default/files/Art.2%20engleza_11.pdf

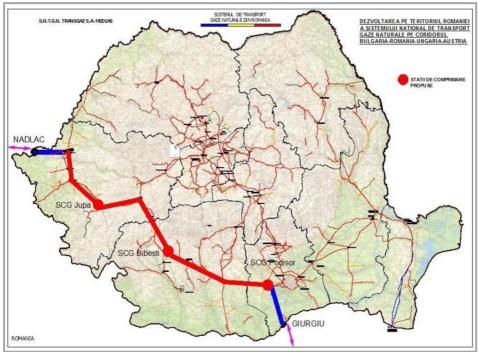


Fig. 2.1.4. Map of the main development project related to the Corridor Bulgaria-Hungary-Austria – Phase 2

Source: Transgaz, https://www.transgaz.ro/sites/default/files/Art.2%20engleza_11.pdf

2.2. Environmental aspects

After meeting US President Barack Obama in 2009, while addressing to both houses of the US Congress, German Chancellor Angela Merkel has made clear that an urgent, multilateral climate agreement in the upcoming UN Climate Conference in Copenhagen (2009) must keep global warming below 2°C. She was the first German chancellor to address Congress was Konrad Adenauer in 1957. Though endorsed by over 140 UNFCCC Parties, The Copenhagen Accord was not adopted as a UN decision. Formal acknowledgment by the UN came one year later, in Cancún. The Durban Conference (2011) rendered the Cancún Agreements operational and built on them (European Commission).

Chancellor Merkel underlined that "we have no time to lose. (...) It is true that there can be no agreement without China and India accepting obligations, but I am convinced that if we in Europe and America show that we are ready to accept binding obligations, we will also be able to persuade China and India to join in" (Euractiv, 2009).

In Barroso's view, EU' strength to lead on climate change was revealed not just in "agreeing to binding targets but also in approach the climate change negotiations in Copenhagen (2009) with a clear vision of how the global community can address the problem it faces, and a clear commitment to climate finance for developing countries" (Barroso, 2009).

Global efforts reached their peak with the ratification by almost 190 Parties of the Paris Agreement on Climate Change. It is the first-ever universal, legally binding global climate change agreement, adopted at the Paris climate conference (COP21) in December

2015. The EU has formally ratified the agreement on 5 October 2016, and it has entered into force on 4 November 2016 (European Commission).

Junker Commission's priorities (2014) had also made reference to a more ambitious "climate change policy", as part of the consequences of fostering what he called "the Energy Union": "And we need to strengthen the share of renewable energies on our continent. This is not only a matter of a responsible climate change policy. It is, at the same time, an industrial policy imperative if we still want to have affordable energy at our disposal in the medium term. I therefore want Europe's Energy Union to become the world number one in renewable energies" (Juncker, 2014).

2015 and 2016 State of the Union speeches have both reiterated the EU's aim of reduce domestic greenhouse gas emissions by at least 40% by 2030. Referring to the Paris Agreement, President Juncker denominated it the "last chance to hand over to future generations a more stable world, a healthier planet, fairer societies and more prosperous economies" (Juncker, 2016).

Addressing in the Rose Garden on October 5, 2016, former US President Barack Obama praised the historic day of signing the Paris Agreement "in the fight to protect our planet for future generations". He recalled the beginnijng of talks back in 2009 and the US "leadership by example": "In 2009, we salvaged a chaotic climate summit in Copenhagen, establishing the principle that all nations have a role to play in combating climate change. (...)We continued to lead by example with our historic joint announcement with China two years ago, where we put forward even more ambitious climate targets. And that achievement encouraged dozens of other countries to set more ambitious climate targets of their own. And that, in turn, paved the way for our success in Paris — the idea that no nation, not even one as powerful as ours, can solve this challenge alone. All of us have to solve it together" (The White House, Office of the Press Secretary, 2016).

3. Transatlantic cooperation after 2017

3.1. Energy cooperation

Supportive of the transatlantic strategic cooperation with respect to energy, in order to diversify its energy import sources and render its energy supply more secure, the European Union would have imported more liquefied natural gas (LNG) from the US, the Joint U.S.-EU Statement (July 2018) reads (European Commission, 2018). American LNG exports to the EU rose significantly between 2016 and 2019. A steep increase could have been observed especially after the visit that the Head of the European Commission, Jean-Claude Juncker, paid to Washington to meet President Donald Trump in July 2018.

Despite its continuous goal to reduce EU's reliance on Russian energy since the 2014 crisis in Ukraine, Europeans' pledge to buy more American gas-as long as they sell it at a competitive price- came as a means to ease frictions in the midst of the well-known trade wars between the blocs and to avoid the imposition of further tariff barriers.

US Energy Secretary Rick Perry, attending an energy summit in Brussels, said in 2019 that the agreement to increase US natural gas exports would bring "tremendous mutual benefit" to both sides. He added that price should not be the only aspect taken into account when purchasing gas. "You get what you pay for … you might buy cheaper somewhere else, but it may not be reliable," he said while answering to a question about the natural gas imported from Russia (Kottasová, 2019).

The EU imports 77% of its natural gas. Less than 1% came from the US, as of 2019.

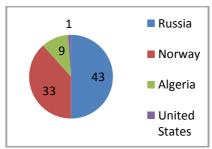


Fig.3.1.1. EUROPE'S GAS IMPORTS (2019)

Source: CNN Business, https://edition.cnn.com/2019/05/02/business/natural-gas-us-ew/index.html

March 2019 has recorded the highest volume ever of EU-U.S. trade in LNG (more than 1.4 billion cubic meters estimated at almost €0.3 billion). By 19th of November the imports reached almost 2.6 billion cubic meters and their value was estimated at €0.4 billion. The high-level Business to Business energy Forum on 2 May 2019 was a clear signal of the strengthened cooperation between the U.S. and the EU in this field (European Commission, 2019).

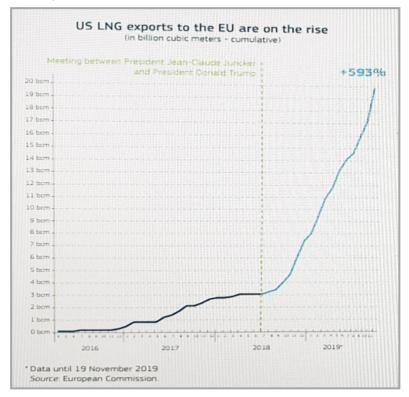


Fig.3.1.2. US LNG exports to the EU (in bcm)

Source: European Commission, https://ec.europa.eu/energy/sites/ener/files/eu-us_lng_trade_folder.pdf

Since April 2016, a total of 19.4 billion cubic meters (EUR 3.4 billion) of U.S. LNG has been imported in the EU. The European Commission assessment underlined in 2019 that transatlantic LNG trade could increase even further over the next four years, as more than 8 billion cubic meters per year were contracted by US and European companies

since 2018. Moreover, strengthening EU-US cooperation on energy matters was understood as potentially delivering a signal for the entire European continent and the world at large concerning the advantages of U.S. LNG. According to the European Commission, this can play a significant role in the EU energy supply chain, while contributing to enhanced diversification and the EU energy security.

Further transatlantic cooperation will be aimed at: removing unnecessary U.S. LNG licensing barriers to accelerate U.S. exports, working on reciprocal solutions to provide equivalence for the purposes of access to markets, developing joint efforts to complete key missing infrastructures and investments in Europe to improve access to LNG, and establishing regular consultations and promotion activities with market operators to make U.S. the major gas supplier to Europe (European Commission, 2019). On a different note, boosting gas exports could significantly affect greenhouse gas emissions outside of the US, an analysis conducted by Climate Action Tracker notes (Climate Action Tracker, 2019).

3.2. Environmental aspects

The Political Guidelines of the von der Leyen Commission (2019-2024) did not mention precisely a coherent energy policy of the EU. Instead, the new approach focuses more on addressing climate-related issues, by introducing the ambitious European Green Deal, a European initiative to become the first climate-neutral continent.

The Paris Agreement goals and the 2030 targets are to be met, while extending the EU potential even further. For instance, the goal of 40% emissions reduction by 2030 could be overpassed by more successful results (50-55% by 2030 and even zero emissions by 2050). Proposals also included the first European Climate Law to enshrine the 2050 climate neutrality target into law. In order to ensure that EU companies compete in a fair manner, a Carbon Border Tax will be implemented to avoid carbon leakage, in full compliance with the multilateral system of the WTO rules. A review of the Energy Taxation Directive was also on the new Commission's agenda.

To ensure a just transition for all (European citizens and regions), the EC has proposed establishing a Just Transition Fund. A European Climate Pact – bringing together regions, local communities, civil society, industry and academia- could design and commit to a set of pledges to stimulate new behavioral patterns, from the individual to the largest multinational.

Since public finances alone will not suffice to achieve the ambitious goals, tapping into private investment will be resorted to as well - as stated in the Guidelines -, with green and sustainable financing to take center stage in the EU investment chain and financial system. A Sustainable Europe Investment Plan will support $\[mathbb{e}\]$ 1 trillion of investment in the next decade all over the EU (von der Leyen, 2019: 5-6).

As part of the European Green Deal, the European Commission pledged to come up with a Biodiversity Strategy for 2030. People's and planet's health are tightly interconnected.

The farmers' efforts to provide Europeans with nutritious, affordable and safe food will be supported with a new "Farm to Fork Strategy" on sustainable food along the whole value chain, the Guidelines read. Investing in the future development and preservation of the rural areas (which are home to more than 50% of the EU citizens) is a desired end of the Commission's plan for the period 2019-2014 (von der Leyen, 2019: 7).

The idea of a European Green Deal also came as a consequence of the US' withdrawal from the Paris Agreement. On November 4, 2019, the US formally notified the

international community about their withdrawal from the Paris Climate Agreement, "because of the unfair economic burden imposed on American workers, businesses, and taxpayers by U.S. pledges made under the Agreement" (Pompeo, 2019). The announcement is the first step of a one-year-long process formalizing the US decision by November 2020, thus making them the only country outside the accord.

In this strained context, the von der Leyen Commission took the opportunity to pledge for an ambitious aim to "lead international negotiations to increase the level of ambition of other major emitters by 2021" (von der Leyen, 2019: 6). Moreover, concerns in the EU have made leaders consider more seriously the already existing EU-China cooperation on climate matters. While in Shanghai to chair the opening ceremony of the international exhibition of Shanghai imports, French President Emmanuel Macron said that "the cooperation between China and the European Union in this respect is decisive". (Tamma, Oroschakoff, 2019).

Bas Eickhout, a Greens MEP, stated in 2019: "the fact that the U.S. has abandoned the global climate stage makes it even more important that the EU steps up its game and leads the way at international climate negotiations. The new Climate Commissioner, Frans Timmermans, should start by proposing higher climate targets of reducing CO2 emissions by at least 65 percent by 2030", he added (Johnson, 2019).

Besides this striking political decision, the Trump Administration has put forward over 50 rollbacks targeting climate policy. The table below presents a selection of them -completed or in process - as well as the estimated effects on the environment, some of them potentially contributing to an increase in GHG emissions with about 3% by 2030.

Policy	Status	Trump Administration action	Estimated emissions impact if Trump Administration action is implemented (as compared to current policy scenario)		
Clean Power Plan (CPP)	Rollback completed	Replacement in July, 2019 (U.S. Environmental Protection Agency, 2019a)	No effect. Even without the policy the cost reduction of qas and renewables in the power sector lead to overachievement of the 32% emissions reduction qoal in the sector compared to 2005 levels, that was envisaged by the CPP (U.S. Energy Information Administration, 2019)		
Energy Conservation Standards for General Service Lamps (GSL)	Rollback completed	Will not enforce (U.S. Department of Energy, 2019)	Cumulative + 100 MtCO ₂ e through 2020-2028, no effect in 2030, policy rollback only postpones the development (CAT calculations)		
Significant New Alternatives Policy (SNAP) Programme	Rollback completed	Will not enforce (U.S. Environmental Protection Agency, 2018a)	+78−101 MtCO₂e/yr in 2030 (U.S. Environmental Protection Agency, 2015)		
CAFE standards for In-process light duty vehicles		Proposal to freeze standards at 2020 levels (U.S. Environmental Protection Agency et al., 2018)	+22–76 MtCO ₂ e/yr in 2030 (Climate Action Tracker, 2017b)		
Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources	In-process	Proposal to modify standards (U.S. Environmental Protection Agency, 2018b)	+9.2 MtCO ₂ e/yr in 2030 (U.S. Environmental Protection Agency, 2016)		

Fig.3.2.1. Selection of policy rollbacks since the start of Trump's Administration *Source*: *Climate Action Tracker*, https://climateactiontracker.org/press/effect-of-the-us-withdrawal-from-the-paris-agreement/

As an observation, there were two opposite effects which cancelled each other out. Increased emissions generated by the aforementioned rollbacks have been largely compensated by a lower emissions projection in the electricity generation sector, due to a changing power generation mix, with increased use of gas and cheaper renewables, which

is continuing to displace coal, the U.S. Energy Information Administration notes in the Annual Energy Outlook 2020 (U.S. Energy Information Administration, 2020). The trend was the same in the 2019, as presented in the annual report (U.S. Energy Information Administration, 2019).

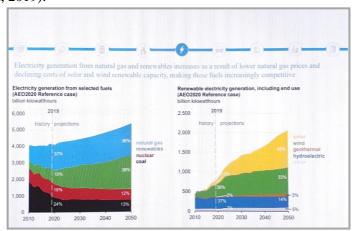


Fig.3.2.2. Electricity generation from selected fuels and renewable (US) *Source*: *U.S. Energy Information Administration*, https://www.eia.gov/outlooks/aeo/pdf/AEO2020%20Full%20Report.pdf

The press statement on the U.S.'s withdrawal from the Paris Agreement (November 4, 2019) delivered a reassuring closing remark to their "friends" in the international community, on matters of multilateral engagement in environmental issues: "In international climate discussions, we will continue to offer a realistic and pragmatic model – backed by a record of real world results – showing innovation and open markets lead to greater prosperity, fewer emissions, and more secure sources of energy. We will continue to work with our global partners to enhance resilience to the impacts of climate change and prepare for and respond to natural disasters. Just as we have in the past, the United States will continue to research, innovate, and grow our economy while reducing emissions and extending a helping hand to our friends and partners around the globe" (Pompeo, 2019).

Conclusions

As concluding remarks, over the years, the EU-US cooperation in the field of energy has been growingly active. International institutional frameworks where the two had been involved and transatlantic bilateral forums have laid the foundation for concrete steps to ensure security of supply and to promote sustainable and competitive global energy markets. Trends in American LNG imports into the EU have been popular beginning with 2016.

The US has also contributed to the effective construction of pipelines interconnecting EU countries, such as the BRUA pipeline. From a geopolitical and geoeconomic perspective, this project attracting gas from the Southern Corridor (or the Black Sea) stands as a competitor to North Stream 2, the completion of which remains a Russian Gazprom's "clear European priority" (Theisen, Szabo, 2019).

When it comes to environmental policies, history has registered slightly different tendencies on the two sides of the Atlantic, especially under the Trump Administration. Considering that "the EU's emissions account for only about 9 percent of global emissions

and, therefore Europe, by itself, can only make a relatively small contribution to putting the planet on a sustainable path toward climate neutrality", GMFUS Senior Fellow Douglas Hengel argued that "the European Green Deal brings both opportunities and challenges for the broader U.S.-EU cooperation", as the EU advanced two main proposals for addressing carbon-leakage, that could be potentially problematic for transatlantic relations (Hengel, 2020).

Firstly, the EU is willing to negotiate comprehensive trade agreements only with Parties to the Paris Agreement. Trade policy in particular was highlighted by the European Commission to support the EU's "ecological transition" (Hengel, 2020). Provided "international partners do not share the same ambition (on climate) as the EU, there is a risk of carbon leakage, either because production is transferred from the EU to other countries with lower ambition for emission reduction, or because EU products are replaced by more carbon-intensive imports. If this risk materializes, there will be no reduction in global emissions, and this will frustrate the efforts of the EU and its industries to meet the global climate objectives of the Paris Agreement" (European Commission, 2019).

Secondly, the European Commission initiative to develop a "carbon border adjustment" (CBA) mechanism meant to reduce the risk of carbon leakage was feared by Americans not to take the form of another protectionist tariff, adding "a carbon price to products imported into the EU to level the playing field between domestic producers facing costly climate measures and foreign producers facing less stringent requirements" (Hengel, 2020).

The European Commission has targeted the CBA measure at several sectors, among which steel, cement, and chemicals are potentially considered, though not already defined as such (Hengel, 2020). A measure like this would definitely be received with strong opposition in the US and it will support further the previous trade rows that have affected transatlantic economic engagement lately.

In the best-case scenario, the launch of the European Green Deal should be appealed to by the EU and the US in order "to enhance their already strong cooperation on the technologies essential to decarbonization", Hengel adds (Hengel, 2020). This could work as a win-win approach, since energy efficiency, hydrogen, carbon capture, battery storage, alternative transportation fuels, electric-grid resilience, and cyber security are some of the areas where the two partners have already developed a cooperation tradition. Like in a spiral, joints efforts on these matters would help bolstering transatlantic progress in the clean-energy competition with China, his argument goes.

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