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Will the European Green Deal Finally Get the Green Light?

In 2019, the European Union set the goal of the continent becoming carbon neutral by 2050, which will be achieved by adopting a number of measures. The European Green Deal is closely linked to the Paris Agreement (2015), signed by more than 190 countries, which aims to avoid extreme climate change by keeping the global average temperature below 1.5°C. This requires, among other things, reducing greenhouse gas emissions from all sectors by increasing energy efficiency and independence, building a circular economy and preserving biodiversity, and therefore a combined reform of environment, climate and energy policies are needed. The coronavirus pandemic starting in 2020, as well as representing a daunting challenge has also provided an opportunity to transform the European and even the global economy in a greener way. The Russia–Ukraine war in February 2022 has woken Europe up to the urgent need to increase the resilience of its energy sector, for example through the substitution of fossil fuels by alternative/renewable energy sources. The question now is whether European policy makers, and indeed European societies will be able to seize the opportunity offered by external factors.

Introduction

The complex process of climate change has affected the world for decades, although its spectacular consequences have only begun to become visible to the everyday person in recent years. While the climate has always been subject to changes, the present consequences are due to the increased human greenhouse gas (GHG) emissions. The widespread use of the term global warming is an indication of the extent of the phenomenon, as there is no part of the world today where climate change is not having an impact. Since the beginning of the 2000s, the world has been experiencing a period of extreme weather, even if the form it takes and the geographical location varies: most African countries are experiencing increasing droughts year after year,[1] while elsewhere it is extreme rainfall which causes major damage disasters. These contradictory phenomena are also occurring in Asian countries and throughout Europe. In many European countries, 2021 was a year of floods, with a high number of forest fires and a record-breaking heat wave (Sicily – 48.8°C),[2] while in 2022, the onset of intense heat waves caused an unprecedented drought across much of the continent.[3] These impacts and consequences have alerted European policy makers to the urgent need to take action to mitigate weather anomalies by reducing greenhouse gas emissions and to stop further damage from climate change where it is possible.

[1] Marsai 2022.
[2] Fillon 2022.
[3] Copernicus 2022.

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In 2015, the European Environment Agency named the European Union as the world's third largest carbon emitter,[4] which – among other drivers such as the Paris Agreement (2015) – has accelerated action on climate protection. This paper reviews the EU's climate policy efforts on the path towards European carbon neutrality, taking into considering the assessment of the situation in the Member States, the implications of the Russia–Ukraine war and the projected priorities for the Hungarian Presidency in the field of green action. The study does not go into detail on each of the segments of environmental protection, such as measures specifically aimed at reducing biodiversity loss or developing a circular economy.

Milestones for a green Europe

The issues of climate change mitigation and the drive for a sustainable environment date back to the last century, both on national and international platforms. Initially addressed in various fora of the United Nations (Brundtland Commission: Our Common Future, 1987; Rio Conference, 1992; UNFCCC: Kyoto Protocol, 1997), green issues have been steadily appearing in regional and local decision-making, influenced by international discourse and conventions. The Paris Agreement, signed in 2015 by all the European states, is a milestone in the European Community's efforts to green the transition, with the EU committing to a minimum 40% reduction in greenhouse gas emissions by 2030 compared to 1990 levels. In doing so, the signatories have committed to a headline target of keeping the global average temperature change well below 2°C, along with taking further measures to reduce the global average to 1.5°C.[5] Related to this and the earlier provisions at Community level, the European Commission – led by Ursula von der Leyen, who took office in 2019 – has prepared the *European Green Deal* framework document, which provides the basis for policy-making to achieve the targets (see section *Key elements of the European Green Deal*).

Early activities

The seeds of European green thinking were sown in the early 1990s with the first report of the Intergovernmental Panel on Climate Change, which gave a new impetus to the EU climate policy discourse in all decision-making bodies. Although environmental action had already been on the Community's agenda since the 1970s, through various programmes and grants – e.g. The Birds Directive, the ACE Rule for clean technology and the promotion of nature conservation etc. – these were not as significant as the initiatives launched after 1990.

[4] European Environment Agency 2015.

[5] Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change.

First, targets were set for 2000: Member State leaders agreed to stabilise the GHG emissions of the Community at 1990 levels by the turn of the century. In the absence of a coordinated policy at the time, the aim was to meet the ten-year target by focusing on three areas: reducing GHG emissions, promoting renewable energy and improving energy efficiency.[6] In the years that followed, programmes focusing on all three segments (e.g. SAVE, ALTENER) were agreed by Member States, targets were progressively increased and monitoring mechanisms were put in place to facilitate verification. However, achieving emission reductions also required mobilising huge resources because of the need to reform the European economies. The European Union's funding instrument for the environment and climate action *(LIFE)* was set up in May 1992, with an initial budget of ECU 400 million,[7] which was gradually increased in stages. Launched thirty years ago, LIFE encompasses more than 5,500 projects aimed at achieving a circular economy, promoting clean energy and preserving biodiversity, with an increased budget of nearly €5.5 billion for the 2021–2027 budget period.[8] Another example of programmes that prioritise reducing emissions is the EU Ecolabel,[9] which has been in existence for 30 years and which has certified more than 83,000 products and services designed and produced to high environmental standards.

Another pillar of European climate policy is the Kyoto Protocol, which was endorsed by all members of the international community in December 1997 and whose market-based mechanisms were implemented by the European Union with the introduction of the EU Emissions Trading System (ETS) in 2005. Its basic idea is to reduce GHG levels for large emitters (industries, airlines and power plants) by setting an emission quota for companies. If they exceed this quota, they are obliged to pay (or they can buy additional allowances). However, if they do not exceed or remain below the cap, they will be able to sell their remaining allowances. For a long period, the mechanism was not a great success and did not bring much change. It has been successful in reducing emissions in recent years, however, (bringing a record 11.4% reduction between 2019 and 2020, although this can also be explained by the shutdowns generated by the coronavirus epidemic),[10] as the additional cost has an incentive effect on market participants.

Before 2010, further discussions were held between the heads of state or government of the 27 EU member states to agree on the so-called 20-20-20 by 2020. This goal called for a 20% reduction in GHG emissions, a 20% share of renewables in final energy consumption and a 20% saving in final energy consumption by 2020. To implement this, in 2008 the European Commission launched the Climate and Energy Package, which set out a series of policy elements (e.g. reform of the ETS) to help achieve the targets.[11]

[6] Prahl et al. 2014.
[7] The European Currency Unit, the predecessor of the euro, was the currency of the European Community and then of the European Union from 1979 to 1999.
[8] LIFE Programme 2022.
[9] Sustain Europe 2022.
[10] European Environment Agency 2022.
[11] Peña–Rodríguez 2019: 477–486.

As weather anomalies have become more frequent, the 2010s have seen an increasing number of discourses, packages, initiatives or programmes aimed at climate protection and decarbonisation goals. One of the more ambitious of these projects is the *Roadmap for Moving to a Competitive Low Carbon Economy in 2050*[12] from 2011, which called for an 80–95% reduction in greenhouse gas emission by 2050. Another is the Environmental Action Programme, which has in fact been in existence since the 1970s and is the eighth programme on the environmental policy agenda since May 2022.[13] Also worth mentioning in this regard is the Europe 2020 Strategy, which sets out to achieve smart, sustainable and inclusive growth.[14] In addition to these programmes, a number of other climate-related action plans have been published over the last thirty years, with an increased focus on the topic in the last ten years. The *European Green Deal,* launched by the European Commission in 2019, is among the highest level policy elements to promote emission reductions, in which the European Union has shifted its agenda from reducing GHG emissions to eliminating net emissions altogether.

Key elements of the European Green Deal

One of Ursula von der Leyen's first tasks after taking office was to publish the *European Green Deal (EGD*)[15] proposal, which had earlier formed a key part of her campaign. At the time, President von der Leyen described the proposal as "Europe's man on the moon moment", while admitting that "we don't have all the answers yet, the journey is just beginning".[16] The journey started with ambitious plans, as the proposal included an action plan and a roadmap for a "new growth strategy for a sustainable, cleaner, safer and healthier EU economy".[17] The main elements of the roadmap are climate neutrality, i.e. the elimination of net zero greenhouse gas emissions (i.e. only as much greenhouse gas emission from human activities as the earth can absorb) by 2050 (increasing the pledged reduction in emissions from 40% to 55% by 2030), the transition to a circular economy and the restoration of biodiversity. The action proposals cover all policy areas, including sustainable industry and mobility, climate action and energy and resource efficient construction and modernisation. The proposal also addresses the need for the European Union to act as a global leader in the fight to reverse climate change and provides for local involvement through the creation of a European Climate Pact, a forum for European citizens, organisations, businesses and communities. In addition, the Commission has

[12] European Commission 2019.
[13] Decision (EU) 2022/591 of the European Parliament and of the Council of 6 April 2022 on a General Union Environment Action Programme to 2030.
[14] Fogyasztóvédelem 2015.
[15] The term *Green Deal* refers to the *New Deal* programme announced during the administration of U.S. President Franklin Delano Roosevelt, which aimed to create a recovery from the recession following the Great Depression.
[16] Lory–Mc Mahon 2019.
[17] European Commission 2019.

subsequently proposed EU climate legislation[18] to make the EGD and climate neutrality by 2050 an obligation for Member States.

While the green transition did not have to start from scratch at the end of 2019 (the European Commission presented the proposal on 11 December 2019 and the heads of state or government of the member states adopted it a day later), as there was already a wide-ranging debate on climate protection and a well-developed legislative framework in the Community, it is still true that research and development in this field and new investment plans needed a lot more support. Significant resources have therefore been allocated to the green transformation: currently, one third (€600 billion) of the seven-year EU budget and of the Next Generation EU (which is a temporary recovery instrument to help repair the immediate economic and social damage brought about by the coronavirus pandemic) is dedicated to financing the EGD objectives. Special mention should also be made of the Just Transition Mechanism, established under the EGD, which targets regions where the transition to a climate-neutral economy is starting from a disadvantaged position. As this situation affects many regions of the EU, €100 billion will be mobilised over the 2021–2027 budget period to mitigate the socio-economic impacts of the transition. The just transition will be financed from three main sources: nearly €100 billion from the Just Transition Fund and other funds, €45 billion from InvestEU and €25–30 billion from the European Investment Bank's lending facility.[19]

Whether they are called strategies, targets, programmes or action plans, the point is that significant proposals to achieve climate neutrality by 2050 have been put forward in the last three years. First and foremost among them is the "Fit for 55!" package, which includes an increase in emissions reductions from the previous target of 40% to 55% by 2030. This ambitious target was accompanied by clear milestones: proposals to reform the emissions trading scheme, increase the use of renewable energy from 32% to 40%, introduce a carbon tax and end the sale of cars with internal combustion engines from 2035 onwards.[20] Efforts to transition towards relying on renewable energy are also helped by the addition of the so-called taxonomy regulation (see below), which emphasise that nuclear energy and natural gas should be considered sustainable energy sources, although this has been a source of much debate among member states.[21] In addition, the Commission has developed a number of other proposals for action to protect ecosystems and human life, as harmful activities have a negative indirect or even direct impact on human life, such as the "Zero Pollution Action Plan" (2021) aimed at achieving zero pollution for air, water and soil, which deals with the reduction and eventual elimination of plastic waste and pesticides. This key element of the plan was supplemented in October 2022 by a new element: if a country is proven to be in breach of EU air quality rules and

[18] Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law').
[19] EU Funding Overview s. a.
[20] Wilson 2022.
[21] Navracsics 2022.

EU citizens suffer health damage as a result, they will be entitled to compensation.[22] It should also be noted that, while the detailed path to achieving the standards set is left to national authorities, the Commission can use the infringement procedure if the requirements are not being properly met,[23] for example if a member state does not make access to a sewage disposal and treatment network available to all.[24]

The coronavirus pandemic has made the EU's member states (and the world) aware of the vulnerability of the global system and the need to increase resilience. The Russia–Ukraine war has reinforced this in the relation to Europe's exposure to Russian energy sources, which was already known, but the questions of "what" and "how much" have distracted attention from the questions of "what from" and "how". Energy policy has not been separated from green policy, although the energy crisis and decarbonisation are now even more intertwined. After 24 February, the two policies needed to be established on a new basis, which the Commission has done with the publication of the REPowerEU plan for energy diversification and sustainability. The plan, with a budget of around €300 billion, is designed to help member states to move away from Russian fossil fuels before 2030. The programme has four pillars: energy diversification, early transition to green energy, energy savings and support for smart investments. Hence, in addition to encouraging the use of renewable energy sources instead of fossil fuels (the previous target of 40% is to be raised to 45%), and besides building energy efficiency, they also want to employ an economic recovery mechanism.[25]

The range of options for action is quite broad, so it is up to the member states to make the most of it according to their own capacities. With eight years to go before the first target date and 28 years to go before the second, EU countries are still underperforming. This is partly due to successive crises, but also due to a lack of commitment to the EGD on the part of member states. Although some countries have been at the forefront of the green transition because of their favourable geopolitical position (the latter having been rather valorised by the war), their practices are difficult to adapt to other countries.

Results so far

There is evidence that GHG emissions have been on a downward trend over the last few years, with the EU27 emissions rate of almost 80% in 2017 (compared to 1990 levels) falling to 66.7% in 2020.[26] However, industrial shutdowns across Europe due to the coronavirus pandemic may have contributed to this, so data from the years after 2021 will certainly be more relevant to how the EU27 is performing in terms of emissions. Examining the individual performance of the Member States, only 11 countries have below

[22] European Commission 2022a.
[23] Euractiv 2022.
[24] European Commission 2022b.
[25] European Commission 2022c.
[26] Eurostat s. a.

average emissions, so 11 of the 27 EU Member States are most likely to achieve a 55% reduction by 2030 based on data from 2020.

Table 1: Greenhouse gas emissions and renewable energy use in the EU27 plus Iceland and Norway as a percentage, 2020

Country	GHG emissions, compared to 1990 % (2020)	Share of renewables in the energy mix % (2020)
EU27	66.7	22.09
Belgium	75.2	13
Bulgaria	*49.3*	23.319
Czech Republic	*66.4*	17.303
Denmark	*57.5*	31.681
Germany	*57.1*	19.312
Estonia	*34.8*	30.069
Ireland	106.8	16.160
Greece	69.6	21.749
Spain	94.9	21.22
France	73.2	19.109
Croatia	71.8	31.023
Italy	67.7	20.359
Cyprus	147.6	16.879
Latvia	81.6	42.132
Lithuania	*35*	26.773
Luxembourg	78.1	11.699
Hungary	*61.1*	13.850
Malta	83.2	10.714
Netherlands	75.6	13.999
Austria	109.1	36.545
Poland	79.9	16.102
Portugal	85.5	33.982
Romania	*34.6*	24.478
Slovenia	78	25
Slovakia	*44.7*	17.345
Finland	*53.4*	43.802
Sweden	*20.6*	60.124
Iceland	105.3	83.725
Norway	71	77.358

Source: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Share_of_energy_from_renewable_sources,_2021_(%25_of_gross_final_energy_consumption).png; https://ec.europa.eu/eurostat/databrowser/view/env_air_gge/default/table?lang=en

As shown in the table below, the share of renewables in the energy mix is even less likely to lead to the 2030 target of at least 40% being met (if only energy produced in the EU is taken as a basis [42% of the EU's energy], renewable energy accounts for 40.8%). Three Member States (Latvia, Finland and Sweden) already met this share in 2020, but only five (Denmark, Estonia, Croatia, Austria and Portugal) were above 30% for

renewables.[27] This means that 19 countries still have a lot of investments and reforms to make to maintain European unity by 2030.

On the last day of 2021, the European Commission presented to member states a delegated act supplementing the EU Taxonomy Regulation,[28] which states that natural gas and nuclear energy can contribute to the decarbonisation of the EU economy and to the shift of member states towards renewable energy sources, i.e. that these energy sources should be included in the EU taxonomy list. The Commission's proposal is not intended to give specific guidance to EU countries on which alternatives they can use to make the green transition and to develop their energy mix – as this remains a national decision – but to provide a broad framework to help them achieve their climate targets as smoothly as possible. Under the revised taxonomy regulation, such investments will also be supported in the future, provided that strict regulations (e.g. proper storage of radioactive waste) are respected by operators. Focusing on nuclear energy, climate neutrality and diversification efforts seem to be more achievable for only 13 of the EU Member States (12 in fact, because Germany, even if it puts two of its last three plants on emergency standby because of the war, will abandon nuclear power in a year at the latest),[29] while considering all the European countries, 18 out of 44 have nuclear power plants. Nevertheless, this number could increase, as Poland and the Netherlands start energy production in their power plants in the near future, while several countries are planning to expand their capacity.[30] However, a study by the Hungarian Energiaklub found that "among the countries without nuclear reactors, the countries of Northern Europe, the Balkans and Southern Europe with significant hydro, wind or even geothermal energy resources are over-represented […]", meaning that more EU countries could be closer to the climate targets if all are considered together. One of the best examples outside the EU is Iceland, which has no nuclear power plants and is building its energy system using geothermal energy; it is no coincidence that the share of renewables in the energy mix in that country is over 80%. Norway is in a similar position, with hydroelectricity from its rivers enabling it to achieve a significant 77% of renewable energy use. Latvia, which also lacks nuclear power plants, boasts a figure of over 40%.

However, there are also many counterexamples where neither renewable nor locally produced energy has a high share of energy generation for geographical and financial reasons, and where nuclear energy is also not produced in the country. Examples of this include Malta, with a fundamentally high GHG emission (83.2%) and an import dependency of 97.6%. The other island country, Cyprus, has much higher emissions (as electricity is produced from oil instead of natural gas) and a similar import dependency, while Luxembourg is also of this type, although it has lower emissions.[31]

While the above examples provide only a limited picture of the relationship between renewable and fossil energies, nuclear energy and GHG emissions, they do demonstrate

[27] Eurostat 2021.
[28] European Commission 2022d.
[29] Conolly 2022.
[30] Major 2022.
[31] Major 2022.

that if a country's geographical/geopolitical situation is not suitable for the mass production of renewable energies and if it does not have nuclear power plants, it will incur a rather higher environmental burden from energy production.

In the shadow of war

The Russia–Ukraine war has further highlighted the energy dependence of EU member states, (largely) on Russian energy sources. A number of summaries, infographics and studies were produced in the first half of 2022, covering everything from the aggregation of dependencies to the origin of the energy consumed.[32] Eurostat data shows that the EU's energy dependency ratio in 2020 was 57.5%, while some member states had ratios significantly below or above the norm. The most energy-dependent country was Malta at 93.5%, while Luxembourg and Cyprus also had values above 90%. Estonia is at the bottom of the scale with a dependency ratio of just 10.5%. Fourteen countries are below the EU average, including Hungary, France, Sweden and the Czech Republic. The graph also shows that Germany needs to import over 60% of its energy to be Europe's economic leader.

The war highlights not only the problem of dependency, but also a lack of energy diversification. It is not only the share of renewables that needs to be increased, as not all member states have the same geographical features. More attention should therefore also be paid to broadening the sources of energy supply of each country. In 2020, of the three fossil fuels imported 54% were coal while 43% of natural gas came from the Russian Federation (45% in 2021). However, the outlook is better for oil: 71% of this energy source is purchased elsewhere, depending on its country of origin.[33]

These figures highlight the achievability of the targets set in the European Green Deal: if member states do not change their energy consumption culture, they could miss not only the 2030 target, but also the 2050 target. There is no better time to diversify to alternative energy sources such as liquefied natural gas, green hydrogen, nuclear, biomass or, of course, conventional renewables, as well as to connect with new economic partners. The member states holding the Presidency of the Council of the European Union can play a major role in this.

It is up to the decision-makers

For the first half of 2022, the EU presidency was held by France, which focused its six months on ambitious (green) goals e.g. carbon tax, battery sustainability, mirror clauses.[34] At the outbreak of war, these objectives were completely eclipsed by crisis

[32] European Council 2022b.
[33] European Council 2022a.
[34] Élysée 2021.

management tasks. Moreover, by prioritising energy issues, although the two segments are almost inseparable, the environmental aspect was somewhat forgotten, for example with decisions extending the lifetime of coal-fired power plants or bringing them back into operation.[35] Member states must first and foremost build up reserves for the colder months, which is inconceivable in the short term with renewables: installing new systems is time- and resource-intensive, and energy storage is weather- and storage-capacity-dependent.

The incoming EU Presidencies will therefore have a responsibility to help Member States to overcome the energy crisis, for example by supporting Commission proposals and allocating resources, including through the 10-point package of proposals developed by the International Energy Agency, which, in addition to recommending a broadening of the scope and content of procurement, encourages energy-efficient building renovation and maximising energy production from bio and nuclear energy.[36]

Energy and green policy will certainly play a cardinal role on the agenda of the Hungarian Presidency, which will start in the second half of 2024, because even if the crisis management period is over by then, economic reconstruction will still be on the agenda for years to come. Hungary, as a permanent member of the group of countries in favour of nuclear energy, can move forward with the mandate provided by the extended taxonomy regulation (and with the support of France) to "promote" nuclear power plants, thus opening the negotiations to greater financial support. In addition, the extension of the LIFE programmes, i.e. projects under the Just Transition, which are also operating in Hungary, could also be on the agenda, as many areas, especially in the Central and Eastern European regions, still have a pre-communist attitude to industrialisation. An example of this in Hungary is the second largest producer in the electricity system, the Mátra Coal Power Plant, where the war has led to an increase in lignite production, which had been gradually scaled down earlier.[37] This increased the environmental damage caused by the plant, pushing Hungary even further away from meeting the 2050 target. It is imperative that energy policy-making in the future focuses on long-term effects rather than on the current short-term and same old quick fixes, since if increased EU funds to promote renewable energy are made available to member states, these countries will be better prepared when future crises hit. Therefore, in its crisis management and reconstruction efforts, Hungary must take a decisive stance in favour of renewables, rather than restoring the last coal-fired power plant in operation and extending its operating life. The large area occupied by the plant could even serve as a basis for the creation of an industrial park based on renewable energy, with particular attention to the preservation of employment.

However, it must also be recognised that cooperation, information sharing and R&D collaboration between countries is an essential element of reconstruction. For Hungary, for example, Iceland can set an example of how to exploit geothermal energy, as Hungary

[35] Spiesz 2022.
[36] International Energy Agency 2022.
[37] A Kormány 1452/2022. (IX. 19.) Korm. határozata az MVM Mátra Energia Zártkörűen Működő Részvénytársaság lignitalapú termelése fokozásához szükséges intézkedésekről [Government Resolution 1452/2022 (IX.19.) on measures necessary to increase the lignite-based production of the MVM Mátra Energia Zártkörűen Működő Részvénytársaság].

is also rich in this energy source, although previous developments have in many cases not been successful in the long term. Furthermore, EU-funded projects that bring European countries closer together economically (such as the REPowerEU plan, a contract for a new gas pipeline between Bulgaria and Greece)[38] could also take Europe into a future based on energy diversification, resilience and zero emissions. The coronavirus outbreak and the Russia–Ukraine war have created opportunities and motivation for Europe to finally get serious about the green transition. Now it is up to the will of decision-makers to seize this opportunity and take united European action not only at national political level but also at societal level. In any case, the watchword for the future will certainly be adaptation: member states, companies, individuals, in fact everyone, will have to learn from past behaviour and establish closer relationships, because the future of reconstruction will be determined by close cooperation with each other, sometimes without self-interest.

References

Conolly, Kate (2022): Germany to Delay Phase-Out of Nuclear Plants to Shore up Energy Security. *The Guardian,* 05 September 2022. Online: www.theguardian.com/world/2022/sep/05/germany-to-delay-phase-out-of-nuclear-plants-to-shore-up-energy-security

Copernicus (2022): Copernicus: Summer 2022 Europe's Hottest on Record. *Copernicus Programme – European Commission,* 08 September 2022. Online: https://climate.copernicus.eu/copernicus-summer-2022-europes-hottest-record

Élysée (2021): Présentation de la Présidence française du Conseil de l'Union européenne. *Élysée,* 09 December 2021. Online: www.elysee.fr/emmanuel-macron/2021/12/09/presentation-de-la-presidence-francaise-du-conseil-de-lunion-europeenne

EU Funding Overview (s. a.): *Just Transition Fund (JTF) – Just Transition Mechanism.* Online: https://eufundingoverview.be/funding/just-transition-fund-jtf-just-transition-mechanism

Euractiv (2022): EU Lays Out Plan for 'Zero Pollution' in Air and Water by 2050. *Euractiv,* 27 October 2022. Online: www.euractiv.com/section/air-pollution/news/eu-lays-out-plan-for-zero-pollution-in-air-and-water-by-2050/

Fillon, Tiffany (2022): Summer of 2021 Was Europe's Hottest on Record. *France24,* 23 April 2022. Online: www.france24.com/en/europe/20220423-summer-of-2021-was-europe-s-hottest-on-record

Fogyasztóvédelem (2015): Az Európa 2020 stratégiáról röviden [A Brief Overview of the Europe 2020 Strategy]. *Fogyasztóvédelem,* December 2015. Online: www.fogyasztovedelem.hu/Varia_x/fenntarthato_info.htm

International Energy Agency (2022): *A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas.* Online: https://iea.blob.core.windows.net/assets/1af70a5f-9059-47b4-a2dd-1b479918f3cb/A10-PointPlantoReducetheEuropeanUnionsRelianceonRussianNaturalGas.pdf

LIFE Programme [@LIFE.programme] (2022): LIFE Programme – Increasing LIFE in Malta. *Facebook,* 06 September 2022. Online: www.facebook.com/LIFE.programme/posts/pfbid02F6feTTSq7Fod4VNMdiTLcgRgVBa4C8zoFtS8kPZaM6owzLy4HyMx1CbBw8gdCDKAl

[38] European Commission 2022e.

Lory, Greg – Mc Mahon, Meabh (2019): Green Deal 'Man on the Moon Moment' for Europe. *Euronews,* 11 December 2019. Online: www.euronews.com/my-europe/2019/12/11/green-deal-man-on-the-moon-moment-for-europe

Major, András (2022): Így boldogulnak a megújuló energiával az atomenergiára nemet mondó országok. *Energiaklub,* 25 July 2022. Online: https://energiaklub.hu/files/study/Atomrenergia%CC%81ra%20nemet%20mondo%CC%81%20orsza%CC%81gok.pdf

Marsai, Viktor (2022): Aszály, háború és élelmezési válság sújtja Afrikát. *Mandiner,* 10 July 2022. Online: https://mandiner.hu/cikk/20220706_kulfold_aszaly_afrika

Navracsics, Tibor (2022): Zöld-e a gáz és a nukleáris energia? *Ludovika.hu,* 24 February 2022. Online: www.ludovika.hu/blogok/ot-perc-europa-blog/2022/02/24/zold-e-a-gaz-es-a-nuklearis-energia/

Peña, Juan Ignacio – Rodríguez, Rosa (2019): Are EU's Climate and Energy Package 20-20-20 Targets Achievable and Compatible? Evidence from the Impact of Renewables on Electricity Prices. *Energy,* 183, 477–486. Online: https://doi.org/10.1016/j.energy.2019.06.138

Prahl, Andreas – Hofmann, Elena – Duwe, Matthias (2014): *European Climate Policy – History and State of Play.* Online: https://climatepolicyinfohub.eu/european-climate-policy-history-and-state-play.html

Spiesz, Bianka (2022): Európa-szerte indítják újra a szénerőműveket. *Világgazdaság,* 28 June 2022. Online: www.vg.hu/nemzetkozi-gazdasag/2022/06/europa-szerte-inditjak-ujra-a-szeneromuveket

Sustain Europe (2022): 30 years of EU Ecolabel! *Sustain Europe,* 23 March 2022. Online: www.sustaineurope.com/30-years-of-eu-ecolabel-20220323.html

Wilson, Alex Benjamin (2022): Revision of the Renewable Energy Directive: Fit for 55 Package. *European Parliament,* 09 September 2022. Online: www.europarl.europa.eu/thinktank/hu/document/EPRS_BRI(2021)698781

Legal sources

A Kormány 1452/2022. (IX. 19.) Korm. határozata az MVM Mátra Energia Zártkörűen Működő Részvénytársaság lignitalapú termelése fokozásához szükséges intézkedésekről [Government Resolution 1452/2022 (IX.19.) on measures necessary to increase the lignite-based production of the MVM Mátra Energia Zártkörűen Működő Részvénytársaság]. *Magyar Közlöny,* 152. Online: www.kozlonyok.hu/nkonline/index.php?menuindex=200&pageindex=kozltart&ev=2022&szam=152

Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change. Online: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016D1841&rid=1

Decision (EU) 2022/591 of the European Parliament and of the Council of 6 April 2022 on a General Union Environment Action Programme to 2030. Online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022D0591

European Commission (2019): *The European Green Deal.* Brussels, 11 December 2019, COM(2019) 640 final. Online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0640

European Commission (2021): *A Roadmap for moving to a competitive low carbon economy in 2050.* Brussels, 08 March 2021, COM(2011) 112 final. Online: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0112:FIN:en:PDF

European Commission (2022a): *European Commission: European Green Deal: Commission proposes rules for cleaner air and water.* Online: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6278

European Commission (2022b): *Proposal for a revised Urban Wastewater Treatment Directive.* Online: https://environment.ec.europa.eu/publications/proposal-revised-urban-waste water-treatment-directive_en

European Commission (2022c): *REPowerEU Plan.* Brussels, 18 May 2022, COM(2022) 230 final. Online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A230%3AFIN

European Commission (2022d): *EU Taxonomy: Commission begins expert consultations on Complementary Delegated Act covering certain nuclear and gas activities.* Online: https://ec.europa.eu/commission/presscorner/detail/en/ip_22_2

European Commission (2022e): *Statement by President von der Leyen at the inauguration of the Gas Interconnector Greece–Bulgaria.* Sofia, 01 October 2022. Online: https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_22_5912

European Council (2022a): *Infographic – Where Does the EU's Energy Come From?* Online: www.consilium.europa.eu/hu/infographics/where-does-the-eu-s-energy-come-from/

European Council (2022b): *Infographic – How Dependent Are EU Member States on Energy Imports?* Online: www.consilium.europa.eu/hu/infographics/how-dependent-are-eu-member-states-on-energy-imports/

European Environment Agency (2015): Air Quality in Europe – 2015 Report. *EEA Report,* No 5. Online: www.eea.europa.eu/publications/air-quality-in-europe-2015

European Environment Agency (2022): *The EU Emissions Trading System in 2021: Trends and Projections.* Online: www.eea.europa.eu/publications/the-eu-emissions-trading-system-2

Eurostat (s. a.): *Net Greenhouse Gas Emissions.* Online: https://ec.europa.eu/eurostat/databrowser/view/SDG_13_10__custom_1300365/bookmark/table?lang=en&bookmarkId=bf32e957-0096-48fc-b9a2-e127f51a090d

Eurostat (2021): *Share of Renewable Energy in Gross Final Energy Consumption by Sector.* Online: https://ec.europa.eu/eurostat/databrowser/view/SDG_07_40__custom_2190966/bookmark/table?lang=en&bookmarkId=749c1328-331e-4c33-bbe7-7232f05c0c87

Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'). Online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R1119