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EU Digital Economy:
general framework (DSA/DMA)
and specialised regimes

Energy solidarity and energy security – from green transition to the EU's crisis management

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Lithuania*

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Section I: Multidimensionality of energy solidarity and energy security in EU and national law

Question 1

The concepts of energy solidarity and energy security (security of energy supply) are of significant importance within the context of Lithuania's energy sector. However, the manner in which they are enshrined within the country's national legislation exhibits considerable variation.

The importance of security of energy supply is clearly defined in the main energy legislation of Lithuania, including the Law on Energy of Republic of Lithuania[1] and the Law on Electricity of Republic of Lithuania,[2] Law on Natural Gas of Republic of Lithuania.[3] According to the Law on the Basics of National Security,[4] energy is a crucial economic sector for national security in Lithuania.

The security and reliability of energy supply is one of the key objectives of energy activities, as set out in Article 3 of the Law on Energy.[5] Article 2(35) of

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[1] Seimas of the Republic of Lithuania, 'Lietuvos Respublikos Energetikos Įstatymas', Valstybės žinios, 2002-06-07, Nr. 56-2224.

[2] Seimas of the Republic of Lithuania, 'Lietuvos Respublikos Elektros Energetikos Įstatymas', Valstybės žinios, 2000-08-04, Nr. 66-1984.

[3] Seimas of the Republic of Lithuania, 'Lietuvos Respublikos Gamtinių Dujų Įstatymas', Valstybės žinios, 2000-10-25, Nr. 89-2743.

[4] Seimas of the Republic of Lithuania, 'Lietuvos Respublikos Nacionalinio Saugumo Pagrindų Įstatymas', No. Valstybės žinios, 1997-01-08, Nr. 2-16.

[5] The other listed objectives are as follows: availability and adequacy of energy sources and energy; energy source and energy efficiency; balanced and sustainable development of the energy sector through energy innovation based on smart technologies and energy digitisation; reduction of the negative impact of energy activities on the environment; protection of the rights and legitimate

the Law on Energy defines "security of supply" as the reliability and technical security of energy resources and/or energy. The definition of "technical safety" is also provided in the Article 2(33) of the Law on energy.[6]

It is the responsibility of the Government, or a government-authorised body, to ensure the implementation of measures designed to safeguard the security of energy supply (Article 5(2)(11) of Law on Energy of Republic of Lithuania). The Ministry of Energy is responsible for approving legal acts that regulate matters pertaining to the security of energy supply, the installation, operation, use, technical safety, and efficient use of energy facilities and equipment, as well as other technical issues (Article 6(2) of Law on Energy of Republic of Lithuania).

The Law on Electricity of Republic of Lithuania sets out a number of key objectives, including ensuring the safe and reliable operation of the electricity system, as well as generation, transmission, distribution and supply of electricity (Article 3(1)). The Government, the Ministry of Energy, the Council, the Lithuanian Energy Agency, electricity undertakings and network users whose installations are connected to the transmission networks are responsible for ensuring the security of electricity supply within their respective competences. The Government approves the schedule of measures to ensure security of electricity supply, which lay down the procedure for applying and implementing measures to ensure security of electricity supply, which are necessary for the prevention, preparation and management of crises in the electricity sector.

According to Article 14(2)(1) of Law on Energy of Republic of Lithuania, energy security measures must be included in national energy policy development programmes. In 2019, Lithuania prepared a National Energy and Climate Plan (NECP)[7] for 2021–2030 in line with the requirements of the Energy Union Governance Regulation.[8] An update of the NECP of the Republic of Lithuania was prepared and finally approved in 11 December 2024.[9] Key strategic documents integrated into the updated NECP are:

interests of customers; creation and development of conditions for effective competition in the energy sector; promoting of the use of indigenous and renewable energy sources.

[6] Technical safety is the set of measures and requirements established by this law and other legal acts to ensure the reliability and safety of energy facilities and installations.

[7] 'National Energy and Climate Action Plan of the Republic of Lithuania for 2021–2030', accessed 29 October 2024, https://energy.ec.europa.eu/system/files/2022-08/lt_final_necp_main_en.pdf

[8] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, Amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and Repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council, 328 OJ L §.

[9] Government of the Republic of Lithuania, Resolution No 1069 of 11 December 2024 'On Approval of the National Energy and Climate Action Plan 2021-2030', TAR, 2024-12-11, Nr. 2024-21969.

1. Agenda "National Strategy for Energy Independence" approved by Resolution No. XIV-2856 of the Seimas of the Republic of Lithuania of 27 June 2024 (new recast of The National Energy Independence Strategy)[10];
2. The National Climate Change Governance Agenda was adopted in June 2021.[11];
3. National Air Pollution Reduction Plan adopted in April 2019 and updated in August 2022[12];
4. National Progress Plan adopted on 9 September 2020.[13]
5. Resolution No. 789 of the Government of the Republic of Lithuania of 29 September 2021 on the approval of the general plan of the territory of the Republic of Lithuania.[14]

The Constitutional Court of Lithuania has issued rulings on matters pertaining to energy and energy security in a number of cases. For example, the economic activity conducted in the sphere of energy, *inter alia*, the provision of all consumers with energy resources, is a specific economic activity; such an activity is characterised, among other things, by the fact that conducting this activity has a direct influence on the entire national economy (the Constitutional Court's ruling of 3 April 2015); the options of the legislature to establish the measures in order to ensure the general welfare of the nation in the electricity sector are determined by the particularities of electricity, *inter alia*, by limited resources of electricity as well as by material, financial and other important factors (the Constitutional Court's ruling of 2 March 2009); the *security and reliability of the energy system is a constitutionally important objective* that justifies a particular differentiated legal regulation of economic activity in this sphere on the grounds of the public interest; while regulating, in accordance with the Constitution, *inter alia*, para. 3 of Article 46 thereof, the economic activity in the sphere of energy so that it would serve the general welfare of the nation, *the legislature is obliged to establish such legal regulation that would ensure the security, stability, and reliability of the energy system*, *inter alia*, the opportunity to receive energy supplies from multiple sources (suppliers) under non-discriminatory conditions and at fair prices (the Constitutional Court's ruling of 3 April 2015).[15]

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[10] Seimas of the Republic of Lithuania, 'Dėl Nacionalinės Darbotvarkės „Nacionalinė Energetinės Nepriklausomybės Strategija" Patvirtinimo', Valstybės žinios, 2012-07-10, Nr. 80-4149.

[11] Government of the Republic of Lithuania, 'Dėl Nacionalinės Klimato Kaitos Valdymo Darbotvarkės Patvirtinimo', TAR, 2021-07-02, Nr. 15226.

[12] Government of the Republic of Lithuania, 'Dėl Nacionalinio Oro Taršos Mažinimo Plano Patvirtinimo', TAR, 2019-04-26, Nr. 6860.

[13] Government of the Republic of Lithuania, 'Dėl 2021–2030 Metų Nacionalinio Pažangos Plano Patvirtinimo', TAR, 2020-09-16, Nr. 19293.

[14] Government of the Republic of Lithuania, 'Dėl Lietuvos Respublikos Teritorijos Bendrojo Plano Patvirtinimo', TAR, 2021-10-06, Nr. 20951.

[15] On public interest services in the electricity sector, No. 13/2013-34/2014 (Constitutional Court of the Republic of Lithuania 29 October 2015).

In its ruling of 29 October 2015,[16] the Constitutional Court of the Republic of Lithuania cited Directive 2009/72/EC (in force at that time), including its provisions concerning the security of supply.[17] The Constitutional Court of Republic of Lithuania has frequently highlighted the significance of the jurisprudence of the Court of Justice of the European Union as a source of legal interpretation, is also important for the interpretation and application of the Lithuanian law (Decisions of 21 December 2006, 15 May 2007, 4 December 2008, 27 March 2009, 22 December 2011, and 14 April 2014).

In one of the most recent cases, the Constitutional Court ruled on the constitutionality of limiting the capacity of solar energy, concluding that such limitations are justified on the grounds of energy security. The amendment to Article 13, para. 10 of the Law on Energy from Renewable Sources of the Republic of Lithuania (LRES) established that the total installed capacity of solar power plants cannot exceed 2 GW.[18] By ruling of 7 November 2023,[19] Constitutional Court recognised that Article 13, para. 10 of the LRES conflicted with Article 46[20] of the Constitution and the constitutional principles of a state under the rule of law and responsible governance, insofar as it did not establish how the relationships of the economic activities of the persons who had already started the process of installing solar power plants, but who were no longer able to continue that process due to the imposed limitation on the total installed capacity of solar power plants, should be regulated. The Constitutional Court emphasised that the Seimas, as the legislative authority, has a very broad discretion to shape the energy policy of the state and to regulate economic activity in the field of energy, *inter alia*, to set priorities for electricity generation from renewable energy sources. Due to the unusually rapid growth of the estimated installed capacity of solar power plants in Lithuania and the risk that the Lithuanian electricity system would be overloaded with this technology, the legislature sought to ensure the public interest – to ensure the reliable and safe functioning of electricity networks and the uninterrupted supply of electricity.

Energy security is subject to more extensive and detailed regulation under Lithuanian national law than energy solidarity. The Law on Natural Gas of the

[16] Ibid.

[17] A secure supply of electricity is of vital importance for the development of European society, the implementation of a sustainable climate change policy, and the fostering of competitiveness within the internal market (Recital 5); the security of energy supply is an essential element of public security and is therefore inherently connected to the efficient functioning of the internal market in electricity and the integration of the isolated electricity markets of Member States (Recital 25).

[18] Seimas of the Republic of Lithuania, 'Lietuvos Respublikos Atsinaujinančių Išteklių Energetikos Įstatymo Nr. XI-1375 2, 3, 5, 6, 11, 13...', TAR, 2022-07-07, Nr. 14906.

[19] On the limitation on the total installed capacity of solar power plants (Constitutional Court of the Republic of Lithuania, 7 November 2023).

[20] Article 46, para. 1 states that "Lithuania's economy shall be based on the right to private ownership, freedom of individual economic activity, and initiative."

Republic of Lithuania includes a separate article, Article 62, which addresses regional solidarity. According to Article 62(1), in order to safeguard security of natural gas supply in the internal market and integration of the national market in natural gas of the Republic of Lithuania, the Republic of Lithuania and the Council shall cooperate at the regional level with neighbouring Member States in promoting regional and bilateral solidarity. It is notable that the concept of energy solidarity is not referenced in either Law on Energy of Republic of Lithuania or the Law on Electricity of Republic of Lithuania. Accordingly, the concept of energy solidarity has not been applied in the Lithuanian national case law.

This illustrates that the principle of solidarity is predominantly implemented in Lithuania in accordance with EU law. This encompasses EU primary law (Articles 122, 194, and 222 of the TFEU) and EU secondary law (Regulation (EU) 2017/1938, Regulation (EU) 2022/2576, and others). Of particular significance is the judgment rendered in the *OPAL* case. This indicates that the Constitutional Court and other courts of Lithuania will consider the CJEU's rulings set out in the *OPAL* case when relevant to the circumstances of the case and the question at hand.

Question 2

In the *OPAL* case, the Court made several noteworthy observations regarding the principle of solidarity, which may prove relevant for conceptualizing the impact of this principle. In the EU, solidarity "underpins the entire legal system of the European Union," and it is closely linked to the principle of sincere cooperation, laid down in Article 4(3) TEU, pursuant to which the European Union and the Member States are, in full mutual respect, to assist each other in carrying out tasks which flow from the Treaties.[21] A review of the legislation reveals that the principle of energy solidarity in Lithuania can be primarily discussed in light of its inclusion in the TFEU, particularly in Article 194 thereof.

Interpretation of the solidarity principle in the *OPAL* ruling and under Article 194 of the TFEU seems to impose rights and obligations upon the Member States and EU institutions. In accordance with the ruling, "[…] the principle of solidarity entails rights and obligations both for the European Union and for the Member States, the European Union being bound by an obligation of solidarity towards the Member States and the Member States being bound by an obligation of solidarity between themselves and with regard to the com-

[21] Judgment of the Court of 15 July 2021 *Federal Republic of Germany v European Commission* C-848/19 P, accessed 29 October 2024.

mon interest of the European Union and the policies pursued by it."[22] Energy solidarity principle must inform any action relating to EU policy in that field.[23]

The Court's judgement references an approach that connects the principle of energy solidarity with certain procedural procedures as a form of "solidarity test." The principle of energy solidarity requires that the EU institutions, including the Commission, *conduct an analysis* of the interests involved in the light of that principle, taking into account the interests both of the Member States and of the European Union as a whole.[24] The principle of energy solidarity entails a general obligation, for the European Union and the Member States to take *into account the interests* of all stakeholders liable to be affected, by avoiding the adoption of measures that might affect *their interests*, as regards *security of supply, its economic and political viability and the diversification of sources of supply*, and to do so in order to take account of their interdependence and de facto solidarity.[25] This principle constitutes a criterion for assessing the legality of measures.[26]

However, the aforementioned judgment does not provide detailed guidance as to how a solidarity test should be applied in practice. Furthermore, it is unclear how and in what way a Member State must take the interests of all stakeholders potentially affected into account. In our view, it is important to incorporate the solidarity considerations in particular energy law instruments to lower the ambiguity of such tests in the future.

It is for Member States to apply the principle of energy solidarity through their administrative authorities. It is anticipated that national courts, in particular administrative courts, will play a significant role in assessing government action and in applying for preliminary rulings.

In particular, we believe that the content of the principle of energy solidarity should be developed in a step-by-step approach, both in terms of the development of energy law instruments and in terms of the development of case law, in particular that of the ECJ. As stated in the Court judgment in the *OPAL* case, the EU institutions and the Member States are required to take into account *"[…] the interests both of the European Union and of the various Member States that are liable to be affected and to balance those interests where there is a conflict*."[27] The rule for balancing interests does not imply that the principle of energy solidarity is *beyond* particular national interests. Moreover, the

[22] Ibid., para. 49.
[23] Ibid., para. 67.
[24] Ibid., para. 53.
[25] Ibid., para. 71.
[26] Ibid., para. 45.
[27] Ibid., para. 73.

implementation of the principle of energy solidarity does not relieve Member States of their general obligation to ensure the security of their national energy system and to provide reliable and affordable energy. Article 194(2) of the TFEU establishes Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply.

It seems likely that the principle of energy solidarity will remain important as energy integration continues. Given the EU's dependence on foreign energy resources, it is evident that external solidarity in energy field is a necessity. According to Eurostat, the EU in 2022, produced around 37% of its own energy, while 63% was imported. The aforementioned provisions demonstrate the relevance of energy solidarity and the necessity of its advancement in both internal and external contexts.

Question 3

A key issue is whether the four EU energy policy objectives set out in Article 194 TFEU establish a hierarchy of priorities and, if so, how this hierarchy should be arranged. In the event that this is not carried out, a case-by-case decision will be made. As demonstrated in the answer to Question 1, Lithuania's Constitutional Court in its ruling already had to balance between the solar energy deployment (need to impose limitations on solar energy capacity) and energy security.

The applicability of the solidarity principle to all EU energy policy objectives is likely to bring additional complexity as scope of issues gets wider, including energy efficiency or renewable energy development.
It is not possible at this stage to make an unequivocal statement regarding the role of energy solidarity in triggering a green transition. Firstly, the specific requirements for the solidarity test for a Member State in the context of a green transition, the assessment of the interests of the parties involved and the potential violation of those interests will determine whether the application of the solidarity test will prolong certain green transition actions. However, the provisions of RED III do not indicate that procedures will be prolonged due to the application of the solidarity test.

Question 4

The construction of large energy facilities can have adverse environmental effects, which highlights the importance of conducting thorough environ-

mental impact assessments. The Lithuanian Ministry of the Environment disseminates information on transboundary environmental impact assessments where Lithuania is affected.[28] Of the last ten cases published, eight pertain to energy facility installations, including large wind farms, nuclear power plant life extensions, and the construction of small modular nuclear power plants.

One illustrative example of a proceedings between Lithuania and Belarus at Espoo Convention's Implementation committee in respect to the planned nuclear power plant in Ostrovets, Belarus.[29]. In 2019 it was decided that Belarus had failed to fully comply with its obligations under the Espoo Convention. However, the electricity connections with Poland and Sweden, the ongoing synchronisation project, the Floating Storage Regasification Unit (FSRU), as well as development of oil and gas infrastructures significantly improved Lithuania's energy security.[30]

Question 5

The application of the principle of energy solidarity does *not mean* that EU energy policy must never, under any circumstances, have *negative impacts for the particular interests of a Member State in that field*.[31] As stated in the Court judgment in the *OPAL* case, the EU institutions and the Member States are required to take into account "[…] the interests both of the European Union and of the various Member States that are liable to be affected and to *balance* those interests where there is a conflict."[32]

We believe that there is no one-size-fits-all approach to achieving energy solidarity. For instance, if a decision is taken at the level of a Member State, it is essential to ensure that the balance of interests is taken into account. Integrating solidarity considerations into common legal mechanisms may result in a common denominator, but it is crucial to ensure that the process meets the requirements of the solidarity test.

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[28] Ministry of Environment of the Republic of Lithuania, 'Tarpvalstybinio Poveikio Aplinkai Vertinimas', accessed 29 October 2024, https://am.lrv.lt/lt/veiklos-sritys-1/tarsos-prevencija/planuojamos-ukines-veiklos-poveikio-aplinkai-vertinimas/tarpvalstybinio-poveikio-aplinkai-vertinimas/

[29] UNECE, 'EIA/IC/S/4 Belarus', accessed 29 October 2024, https://unece.org/environmental-policy/environmental-assessment/eiaics4-belarus

[30] Tomas Janeliūnas, 'Energy Transformation in Lithuania: Aiming for the Grand Changes', in: *From Economic to Energy Transition: Three Decades of Transitions in Central and Eastern Europe*, eds. M. Mišík, V. Oravcová (Palgrave Macmillan, 2021), p. 300, doi:10.1007/978-3-030-55085-1_10

[31] Judgment of the Court of 15 July 2021 *Federal Republic of Germany v European Commission* C-848/19 P para. 73.

[32] Ibid.

Question 6

The mandate for developing an EU policy in the energy policy area is set out in Article 4 of the Treaty on the Functioning of the European Union (TFEU), which defines energy as a shared competence between the EU and the Member States. The EU and its Member States are able to legislate and adopt legally binding acts. Member States exercise their own competence where the EU does not exercise, or has decided not to exercise, its own competence. These are the rules that define competence. There are a number of other reasons for how and at what intensity shared competence is implemented.

The European experience shows how, in the spirit of solidarity, states can commit to assisting each other in addressing energy crises, provided sufficiently robust legal arrangements are created to avoid some states from free-riding on the supply security efforts of others.[33]

Russian Federation's unprovoked and unjustified war of aggression against Ukraine and the unprecedented reduction of natural gas supplies from the Russian Federation to Member States threaten the security of supply of the Union and its Member States, this formed the basis for measures at the EU level. The measures of December 2022 include:

- Council Regulation (EU) 2022/2576 of 19 December 2022 on enhancing solidarity through better coordination of gas purchases, reliable price benchmarks and exchanges of gas across borders;
- Council Regulation (EU) 2022/2577 of 22 December 2022 laying down a framework to accelerate the deployment of renewable energy;
- Council Regulation (EU) 2022/2578 of 22 December 2022 establishing a market correction mechanism to protect Union citizens and the economy against excessively high prices.

It would be appropriate to make a reference to the Council regulation (EU) 2022/1854 of 6 October 2022 on an emergency intervention to address high energy prices.

It should be noted that the application of EU instruments in energy field is currently the subject of legal proceedings (Case T-802/22, case C-675/22), so there should therefore be more clarity on the scope and legal basis for their application.

This shows that acting on behalf of the EU in the face of the crisis has strengthened the EU's position in the case of gas purchases, stabilised energy

[33] Anatole Boute, 'Conclusion', in: *Energy Dependence and Supply Security*, ed. Anatole Boute (Oxford University Press, 2023), p. 218, doi:10.1093/oso/9780198890478.003.0007

markets and led to the acceleration of renewable energy. The successes of cooperation and the application of solidarity show the increasing integration in the energy field. However, the application of the solidarity principle can also be seen as a form of governance, as Member States have to take into account the interests of other countries when implementing energy policy. The application of energy solidarity principle goes beyond the limits of national decision-making focused exclusively on national interests and ensures that broader objectives are taken into account. This would allow for the development and rebalancing of the relationship between the Member States and the EU in the field of energy without necessitating a reallocation of competences, for example, the shift towards the predominant exercise of EU competence in the field of energy.

Question 7

Energy security constitutes a pivotal element of the EU's and Member States' energy policy, representing a core objective. The EU's energy security situation is shaped by its dependence on Russia, particularly in the context of gas supply. The Russian–Ukrainian gas conflict in January 2006 led to the suspension of gas deliveries from Russia to Ukraine and the cessation of gas deliveries to the Austrian gas hub. In the wake of Russia's war of aggression against Ukraine in 2022, the EU has taken decisive measures to bolster energy security, including joint gas purchases and the advancement of renewable energy sources. The aforementioned situation has led to an increased focus on the current resilience assessment and risk preparedness measures. The increasing digitalisation of the energy sector increases the threat of cyber-attacks, which we need to be prepared for.

It is important to consider the more general scientific context before discussing energy security within the legal framework.

Initially, before the oil crises in the 1970s, the meaning of energy security was self-evident as it was predominantly used to describe the supply security of oil in the developed countries. Gradually, the definition was broadened up to include other types of fuels, countries, market actors, and perspectives. At the start of the 21st century, environmental and social issues began to be regarded as part of energy security issues.[34] The key questions of "security for whom?," "in the name of what values?," and "from what threats?" became much more difficult to answer which lead to many groups creating their own definitions.

[34] Justinas Jasiūnas, Peter D. Lund, and Jani Mikkola, 'Energy System Resilience – A Review', *Renewable and Sustainable Energy Reviews* 150 (1 October 2021): 111476, doi:10.1016/j.rser.2021.111476

Academic research has highlighted dozens of distinct yet overlapping interpretations of energy security.[35] Having examined 45 different definitions of energy security, Sovacool notes that the concept has become "diffuse and often inconsistent."[36] Kruyt et al. described energy security in four dimensions: availability, affordability, accessibility, and acceptability.[37] Cherp and Jewell are critical of the four A's and seek to develop alternative approach that integrate the perspectives of reliability, sovereignty and resilience into the field of energy security.[38] Energy security, according to the International Energy Agency (IEA), is defined as the "uninterrupted availability of energy sources at an affordable price."[39] In the broader sense, security of supply is comprised of three different dimensions: continuity of supply (i.e. whether consumers are connected to the electricity grid), system security (i.e. whether the power grid is operated in a stable state and remains stable even after failure events), security of supply on the electricity market (i.e. whether electricity production meets demand through the balancing of supply and demand in the electricity market).[40]

Moreover, the energy security definition has changed over the years with broadening and diverging interpretations later accompanied by generalization and integration efforts.[41]

There also seems to be a broad consensus that the concept of and the threats to energy security depend on the structure of the energy system in question.[42] EU Member States face different energy security challenges due to their different energy structures and needs. How energy security issues are addressed depends on both the general EU legal framework and the constitutional, economic, geographical and political specifics of each Member State. Together with economic efficiency and environmental compatibility, security of supply forms an equally important objective of energy policy (energy policy target triangle).

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[35] Kaisa Huhta, 'Energy Security in the Energy Transition: A Legal Perspective', in: *The Palgrave Handbook of Zero Carbon Energy Systems and Energy Transitions*, eds. Geoffrey Wood et al. (Cham: Springer International Publishing, 2022), p. 5, doi:10.1007/978-3-030-74380-2_25-2

[36] Benjamin K. Sovacool, ed., *The Routledge Handbook of Energy Security* (London: Routledge, 2010), 3, doi:10.4324/9780203834602.

[37] Bert Kruyt et al., 'Indicators for Energy Security', *Energy Policy*, China Energy Efficiency, 37, no. 6 (1 June 2009): 2166–81, doi:10.1016/j.enpol.2009.02.006.

[38] Aleh Cherp and Jessica Jewell, 'The Concept of Energy Security: Beyond the Four As', *Energy Policy* 75 (1 December 2014): 415–421, doi:10.1016/j.enpol.2014.09.005.

[39] DGAP, 'Energy Security', accessed 29 October 2024, https://dgap.org/en/research/glossary/climate-foreign-policy/energy-security

[40] Grüner Weg, 'Definition and Monitoring of Security of Supply on the European Electricity Markets Project No. 047/16', 12.

[41] Justinas Jasiūnas, Peter D. Lund, and Jani Mikkola, 'Energy System Resilience – A Review.'

[42] Kaisa Huhta, 'Energy Security in the Energy Transition…'

Article 194 of TFEU states that one of the objectives of EU energy policy is to ensure security of energy supply in the Union. However, the TFEU does not provide the definition of secure energy supply. This illustrates that there is scope for defining and interpreting this concept through policy documents and legislation.

The issue of energy security is addressed in the European Union's energy and climate policies. According to European energy security strategy,[43] the key to improved energy security lies first in a more collective approach, in particular for coordinating network developments and opening up markets, and second, in a more coherent external action. It is stated that too often energy security issues are addressed only at a national level without taking fully into account the interdependence of Member States. The European energy security strategy addressed the most pressing energy security of supply issue, namely the strong dependence on Russia as a main external supplier.

The Energy Union strategy[44] has the vision of ensuring affordable, secure and sustainable energy for Europe and its citizens.[45] The key drivers of energy security are the completion of the internal energy market and more efficient energy consumption. Energy security is related with diversification of supply (energy sources, suppliers, and routes).

Through the "Clean Energy for All Europeans" package of 30 November 2016 the Union has been pursuing an ambitious decarbonisation agenda, in particular by constructing a robust Energy Union, which includes the 2030 goals for energy efficiency and deployment of renewable energy.

The European Green Deal[46] set the EU's target of achieving climate neutrality by 2050. The decarbonisation of the energy system, while recognising the need to maintain security of supply and competitiveness, is critical to achieving climate objectives.

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[43] European Commission, 'Communication from the Commission to the European Parliament and the Council European Energy Security Strategy. /* COM/2014/0330 Final */', 2014, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52014DC0330

[44] 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy', /* COM/2015/080 final */ (2015), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2015%3A80%3AFIN

[45] 'Energy Union', *Consilium*, accessed 29 October 2024, https://www.consilium.europa.eu/en/policies/energy-union/

[46] European Commission, 'Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions The European Green Deal. COM/2019/640 Final', 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN

The "Fit for 55" package[47] consists of a set of inter-connected proposals, which all drive towards the same goal of ensuring a fair, competitive and green transition by 2030 and beyond. The package strengthens eight existing pieces of legislation and presents five new initiatives, across a range policy areas and economic sectors: climate, energy and fuels, transport, buildings, land use and forestry. This package is set to further enhance the energy sector's role in contributing to the EU climate agenda. EU energy policy documents provide an overview of the current energy security situation and an analysis of geopolitical and other energy security threats. EU policy documents also inform the EU's need to implement an energy transition in order to achieve climate neutrality. While energy transition (e.g. deployment of RES) is aimed at achieving climate policy objectives, energy security remains a significant concern in energy law. The development of RES can enhance energy security (decreasing reliance on fossil fuels) while also introducing challenges due to the integration of variable renewable energy into the grid. Additionally, wind and solar power are subject to larger and longer-term weather variations.

EU energy legislation sets out the goal of energy security, establishing legal frameworks to guarantee energy security, infrastructure requirements, and the rights and obligations of authorities, infrastructure managers, and other key stakeholders in the sector. Energy security is a core objective and criterion in many of the authorisation and operating conditions requirements.

The Governance regulation identifies security of supply as one of the five dimensions of the Energy Union.[48] Therefore, security of supply must be included as a separate dimension in integrated national energy and climate plans with regard to: a) increased diversification of energy sources and supply from third countries, which may aim to reduce dependence on energy imports, b) increasing the flexibility of the national energy system, and c) addressing constrained or interrupted supply of an energy source, for the purpose of improving the resilience of regional and national energy systems, including a timeframe for when the objectives should be met.[49] Integrated national energy and climate plans must include policies and measures that are consistent with the preventive action and emergency plans set out in Regulation (EU) 2017/1938.[50] Furthermore, the risk preparedness plans must also be taken into

[47] European Commission, 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Fit for 55": Delivering the EU's 2030 Climate Target on the Way to Climate Neutrality COM/2021/550 Final', 2021, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0550.

[48] Article 1(2), 4(b) of Governance Regulation 2018/1999/EU as last amended by Regulation 2021/1119/EU.

[49] See Article 3 and Article 4 Governance Regulation 2018/1999/EU as last amended by Regulation 2021/1119/EU.

[50] 'Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 Concerning Measures to Safeguard the Security of Gas Supply and Repealing Regulation (EU) No 994/2010', OJ L 280, pp. 1–56.

account. The Governance Regulation also introduced an integrated reporting on energy security. In light of the wording of Article 4 of the Governance Regulation, it can be seen that the energy security category encompasses the resilience of regional and national energy systems.

Additionally, the Electricity Market Directive aims to ensure a high degree of security of supply.[51] Article 2(58) of the Electricity Market Directive defines "security" as means both security of supply and provision of electricity, and technical safety. This Directive also sets out modes for Member States, regulatory authorities and transmission system operators to cooperate towards the creation of a fully interconnected internal market for electricity that increases the integration of electricity from renewable sources, free competition and security of supply. Distribution system operators and transmission system operators play a key role in ensuring a secure, reliable and efficient electricity system in accordance with Articles 31 and 40 of Electricity Market Directive. The Regulation 2019/941[52] sets out a common framework of rules on how to prevent, prepare for and manage electricity crises, bringing more transparency in the preparation phase and during an electricity crisis and ensuring that measures are taken in a coordinated and effective manner. It requires Member States to cooperate, at regional level and, where applicable, bilaterally, in a spirit of solidarity. It also sets out a framework for the effective monitoring of security of electricity supply in the Union via the Electricity Coordination Group

Decision No 1313/2013/EU[53] sets out requirements for Member States to develop risk assessments at national level or at the appropriate sub-national level every three years, and to develop and refine their disaster risk management planning at national level or at the appropriate sub-national level.

Commission Regulations (EU) 2017/1485[54] and (EU) 2017/2196[55] constitute a detailed rulebook governing how transmission system operators and other relevant stakeholders should act and cooperate to ensure system security. Those technical rules should ensure that most electricity incidents are dealt with effectively at operational level.

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[51] 'Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on Common Rules for the Internal Market for Electricity and Amending Directive 2012/27/EU', OJ L 158 14.6.2019, p. 125, art. 1.

[52] 'Regulation (EU) 2019/941 of the European Parliament and of the Council of 5 June 2019 on Risk-Preparedness in the Electricity Sector and Repealing Directive 2005/89/EC', OJ L 158, 14/06/2019, pp. 1–21.

[53] 'Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism', OJ L 347, 20/12/2013, pp. 924–947.

[54] 'Commission Regulation (EU) 2017/1485 of 2 August 2017 Establishing a Guideline on Electricity Transmission System Operation C/2017/5310', OJ L 220, 25/08/2017, pp. 1–120.

[55] 'Commission Regulation (EU) 2017/2196 of 24 November 2017 Establishing a Network Code on Electricity Emergency and Restoration C/2017/7775', OJ L 312, 28/11/2017, pp. 54–85.

Energy security is an important objective of Lithuania's energy policy and plays an important role in Lithuania's energy policy and legislation.

Lithuania in its National Energy and Climate Plan sets objectives for energy security, notably on diversifying sources, as well as for renewables and energy efficiency promotion. National Energy and Climate Plan reveals the distinctive features of Lithuania's energy security landscape. By becoming an EU member in 2004, Lithuania joined the single EU framework, becoming part of the EU's single economic market, which enabled rapid growth of the Lithuanian economy and other areas of national significance. However, in the energy context, the conditions remain almost unchanged as Lithuania has remained systematically and infrastructurally linked to the Russian energy system. Following the definitive closure of Unit 2 of Ignalina Nuclear Power Plant on 31 December 2009, Lithuania's dependence on a single external energy supplier has been further reinforced. Considering that it did not have energy interconnections with the EU mainland and that all natural gas and most of electricity were purchased from a single monopolistic supplier, Lithuania started implementing infrastructure projects of regional importance to interconnect the Lithuanian and EU energy systems.

Lithuania's National Energy and Climate Plan indicates that strengthening the EU's external energy policy, coordinated action by EU Member States and solidarity in the event of crises also contribute to Lithuania's security and, therefore, efforts will be continued to intensify the EU dialogue with key energy suppliers, notably the US, Canada, Norway and Australia.

A new recast of Lithuania's National Energy Independence Strategy (LNEIS) has been approved by the Seimas (Parliament) in June 26, 2024.[56] Lithuania is continuously emphasising the importance of energy security in its energy strategy. The document aims to make Lithuania a fully energy-independent country by 2050 that produces energy for its own needs and exports it. Lithuania's first strategic energy objective is to ensure a secure and reliable energy supply to all consumers (LNEIS, para. 39). Energy security is guaranteed by the integration of the EU and Lithuanian energy infrastructure, markets, systems and sectors. This is achieved by developing a sustainable domestic renewable energy source generation capacity to meet energy consumption needs, maintaining and developing balancing and reserve generation capacities of the electricity system, and developing flexibility and capacities of the electricity system through the creation and implementation of the necessary mechanisms.

[56] Seimas of the Republic of Lithuania, Dėl Nacionalinės darbotvarkės 'Nacionalinė energetinės nepriklausomybės strategija' patvirtinimo, TAR 2024-06-28.

According to the LNEIS (para. 41), the following objectives will be pursued to achieve a secure and reliable energy supply for all consumers:

1. Synchronisation of the Lithuanian electricity system with the Continental European electricity grids (hereinafter 'the CEG'). It shall be ensured that the electricity system of the Republic of Lithuania is ready for synchronous operation with the CEG via the electricity system of the Republic of Poland by the end of 2024 and interconnected with the CEG by February 2025, and that the Harmony Link project between Lithuania and Poland continues to be implemented.
2. Ensuring capacity and flexibility of the electricity system. Ensure the adequacy of the electricity system and establish mechanisms to maintain and develop reserve capacity for electricity generation, while also ensuring the effective development and operation of the market for flexibility and balancing, and the introduction of flexible electricity demand measures and technologies.
3. Development of electricity transmission and distribution infrastructure to ensure reliable and secure electricity supply, to meet the need for connection of facilities enabling new measures for generation, consumption and flexibility of the electricity system.
4. Ensuring the supply of natural and other gas, oil and petroleum products during the transition to a climate-neutral economy by maintaining the Klaipėda Liquefied Natural Gas (LNG) terminal and a reliable gas infrastructure network, the Klaipėda terminal for the handling of liquids (petroleum, bio-fuels, chemical products, and synthetic fuels), the Būtingė oil terminal and other necessary infrastructure.
5. Crisis preparedness and resilient infrastructure in Lithuania's energy sector – strengthening the ability to respond to military, economic, political and climate crises, stockpiling of natural gas, crude oil and petroleum products required to implement international commitments, and other necessary stocks in the event of disruptions and/or breakdowns of energy supply. The physical and cyber security capabilities of the energy sector are also being strengthened to prevent any breach of physical security and cyber security. The security and reliability of energy supply is one of the key objectives of energy activities, as set out in Article 3 of the Law on Energy.[57] Article 2(35) of the Law on energy defines "security of supply" as the reliability and technical security of energy resources and/or energy. The definition of "technical safety" is also provided in the Article 2(33) of the Law on energy.[58]

[57] The other listed objectives are as follows: availability and adequacy of energy sources and energy; energy source and energy efficiency; balanced and sustainable development of the energy sector through energy innovation based on smart technologies and energy digitisation; reduction of the negative impact of energy activities on the environment; protection of the rights and legitimate interests of customers; creation and development of conditions for effective competition in the energy sector; promoting of the use of indigenous and renewable energy sources.

[58] Technical safety is the set of measures and requirements established by this law and other legal acts to ensure the reliability and safety of energy facilities and installations.

The Law on Electricity establishes the foundations for safe and secure operation of the electricity system and the generation, transmission, distribution, and supply of electricity.

Article 23(1) of that Law provides that the electricity transmission system operator is responsible for the stability and reliability of the operation of the electricity system, the performance of the national balancing function in the territory of the Republic of Lithuania, the provision of system services, the operation, maintenance, management and development of interconnections with the electricity systems of other countries, by reducing the capacity constraints in the transmission networks and taking into account the needs of electricity system and electricity grid users.

Article 76(1)(2) of the same Law stipulates the National Energy Regulatory Council should cooperate with foreign national energy regulators to ensure that the transmission system operator has one or more integrated system(s) at regional level covering two or more Member States for capacity allocation and for ensuring the security of the electricity network. The supply of electricity in the event of an emergency is limited or suspended in accordance with the Rules of Electricity Supply and Use.[59] The Lithuanian natural gas transmission system, operating in normal mode, is able to ensure the supply of natural gas without restrictions, and once the LNG terminal in Klaipėda is operational, natural gas can be supplied to the country from alternative sources. As a result, risks to gas supply are significantly reduced, in particular due to geopolitical factors. An alternative gas supply also reduces the risk of gas supply due to technical failures.

In 2022, Lithuania adopted a plan on risk-preparedness in the electricity sector[60] in accordance with Regulation (EU) 2019/941 on risk preparedness in the electricity sector. In the plan it is stated that Lithuania's electric power system operates within a synchronous system of the Commonwealth of Independent States (IPS/UPS) that joins together the electricity systems of Belarus, Russia, Estonia, Lithuania and Latvia (BRELL). The frequency of the BRELL power sub-systems is centrally managed and coordinated by the Energy System of the Russian Federation (Russian Unified Energy System). Therefore, the Baltic States – Lithuania, Latvia, and Estonia that are the European Union (EU) Member States seek to interconnect their electricity systems for synchronous operation with the Continental European networks. Cross-border links with Poland (LitPol Link) and Sweden (NordBalt) are also operated in

[59] Minister for Energy of the Republic of Lithuania, 'Dėl Elektros Energijos Tiekimo Ir Naudojimo Taisyklių Patvirtinimo', *Valstybės žinios*, 2010-02-18, Nr. 20-957, pp. 1–38.

[60] 'Plan on Risk-Preparedness in the Electricity Sector, Approved by Order No 1-32 of the Minister for Energy of the Republic of Lithuania of 17 January 2022', accessed 29 October 2024, https://energy.ec.europa.eu/document/download/66ab5058-026b-457c-839f-0ed5de91e798_en?filename=LT_RPP_electricity.pdf

Lithuania. The plan on risk-preparedness in the electricity sector: 1) submits the summary of regional and national crisis scenarios in the electricity sector; 2) specifies roles and responsibilities of the competent authority as well as tasks assigned to other state institutions; 3) describes national procedures and measures applied in the event of a crisis in the electricity sector; 4) describes regional and bilateral procedures and measures applied in the event of a crisis in the electricity sector; 5) specifies the crisis coordinator and defines its role; 6) describes the stakeholder consultation mechanism and consultations results; 7) provides information about testing of the procedures identified in the Plan.

Russia's war of aggression against Ukraine has brought into sharp focus the extent of EU Member States' energy dependence and demonstrated that the affordability of energy, particularly gas, is a crucial consideration in energy security. The cost of energy has risen significantly for consumers and businesses alike, emphasising the importance of affordable energy sources. The International Energy Agency defines energy security as the uninterrupted availability of energy sources, as well as their affordability.

There is a growing emphasis on accessibility, resilience and risk preparedness at both EU and Lithuanian national levels. This is evident in the legislation that has been adopted at the EU level and in the recently announced plan in Lithuania. In order to effectively assess potential threats, it is essential to consider all aspects of the energy system, including the institutional, market, and physical components.

The question has been raised whether, in the light of the recent incidents with gas pipelines (Nord Stream, Balticconnector), the concept of energy security should be seen in a broader sense than "security of supply." As highlighted in the aforementioned literature, the concept of energy security is broadening in general, and a broader approach can be taken in the aforementioned case if the context requires it. Furthermore, we believe that in the face of threats, the concept of energy security could be complemented by the concept of resilien.

Question 8

After Russia's war of aggression against Ukraine, security of energy supply became even more critical priority for the EU. The current energy security policy includes coordination measures and rules to prevent and respond to accidents on offshore installations and disruptions to energy supply and emergency oil and gas stocks, including exploration and production licences.[61]

[61] 'Energy Policy: General Principles | Fact Sheets on the European Union | European Parliament', 29 February 2024, https://www.europarl.europa.eu/factsheets/en/sheet/68/energy-policy-general-principles

The EU's trans-European infrastructure policy is covered by the Trans-European Networks (TENs) regulations. Adopted in June 2022, the TEN-E regulation on trans-European energy infrastructure[62] identifies 11 priority corridors in different geographic regions for electricity, offshore grid and hydrogen infrastructure.[63] It defines EU projects of common interest within EU countries and projects of mutual interest between the EU and non-EU countries, ends support for new natural gas and oil projects and introduces mandatory sustainability criteria for all projects.

Article 18 (2)(a) states that projects of common interest falling under the energy infrastructure categories set out in Article 24 and in point (1)(a), (b), (c), (d) and (f) of Annex II and point (3) of Annex II shall also be eligible for Union financial assistance in the form of grants for works where they fulfil all of the following criteria: the project specific cost-benefit analysis provides evidence concerning the existence of significant positive externalities, such as security of supply, system flexibility, solidarity or innovation. It is therefore essential to consider the significant positive externalities in terms of both security of supply and solidarity when evaluating the award of grants. It is important that both of these factors play a role at an early stage in the decision on how to finance the project.

The Commission Delegated Regulation (EU) 2022/564[64] includes in its annex the Union list of projects of common interest. The list of projects of common interests is established every two years.[65]

TEN-E regulation on trans-European energy infrastructure[66] repealed the Regulation on Guidelines for Trans-European Energy Infrastructure of 2013 which already determined provisions for identifying Project of Common Interest necessary to implement priority energy corridors for electricity and gas infrastructures. Paragraph 4 of the Preamble Regulation on Guidelines for Trans-European Energy Infrastructure of 2013 stated that "the European Council of 4 February 2011 underlined the need to modernise and expand Europe's energy infrastructure and to interconnect networks across borders, in order to make solidarity between Member States operational, to provide

[62] 'Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on Guidelines for Trans-European Energy Infrastructure, Amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and Repealing Regulation (EU) No 347/2013', OJ L 152, 03/06/2022).

[63] 'Energy Policy'...

[64] 'Commission Delegated Regulation (EU) 2022/564 of 19 November 2021 Amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as Regards the Union List of Projects of Common Interest C/2021/8409', OJ L 109, 08/04/2022, pp. 14–31.

[65] Ibid., para. 1.

[66] Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013.

for alternative supply or transit routes and sources of energy and to develop renewable energy sources in competition with traditional sources." It can be assumed that expression of the Member States' energy solidarity for extended period of time is expressed via identification of a Projects of Common Interest.

Projects of Common Interest may result in diversification of supply routes and creating new routes which should decrease the EU's dependence on a single supplier. It is important to note that the delivery and investment in such infrastructure projects is a key aspect. Another critical factor is determining the most appropriate approach to addressing energy supply concerns: Should this be handled at the country level or on the EU scale? The ongoing war in Ukraine has highlighted the need for a coordinated approach to energy security at the EU level to enhance resilience in the face of potential energy weaponisation by a major supplier.

Responding to the energy crisis brought about largely by Russia's war of aggression against Ukraine, the role of EU energy diplomacy were reinforcing in the EU external energy engagement in a changing world[67] presented as part of the REPowerEU Plan aiming to strengthen energy security and reduce Europe's dependency on Russian energy imports. EU energy diplomacy presented supports a global, clean and just energy transition to ensure sustainable, secure and affordable energy, boosting energy efficiency and the development of renewables; accelerate a just and inclusive green energy transition globally.[68]

Securing alternative gas supplies for Europe, EU and Azerbaijan enhance bilateral relations, including energy cooperation.[69] A Memorandum of Understanding on Strategic Partnership in the field of energy between the European Union represented by the European Commission and the Republic of Azerbaijan (hereinafter 'Memorandum of Understanding') has been signed between Azerbaijan and the European Union.[70] One of the points of Memorandum of Understanding is to double the supply of gas from Azerbaijan to the European Union and to expand the Southern Gas Corridor.[71]

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[67] 'Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU External Energy Engagement in a Changing World', JOIN/2022/23 final § (2022), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=JOIN%3A2022%3A23%3AFIN

[68] EEAS, 'Energy Diplomacy', accessed 29 October 2024, https://www.eeas.europa.eu/eeas/energy-diplomacy_en

[69] 'EU and Azerbaijan Enhance Bilateral Relations', text, *European Commission – European Commission*, accessed 29 October 2024, https://ec.europa.eu/commission/presscorner/detail/en/ip_22_4550

[70] Official website of President of Azerbaijan Republic, 'Azerbaijan, European Union Signed MoU on Strategic Partnership in Field of Energy', accessed 29 October 2024, https://president.az/en/articles/view/56689

[71] 'Statement by President von Der Leyen with President Aliyev', text, *European Commission – European Commission*, accessed 29 October 2024, https://ec.europa.eu/commission/presscorner/detail/en/statement_22_4583

This event is a reflection of the EU's new energy diplomacy with the European Commission assuming a more prominent role. As long as the European Commission carries out the EU's energy diplomacy and acts more effectively than individual Member States in ensuring energy security, that is, uninterrupted energy supplies at affordable prices, this policy must continue.

Question 9

Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action sets out the necessary legislative foundation for a cost-efficient, transparent, and predictable governance of the Energy Union and Climate Action. The aim is to ensure the achievement of the objectives of the Energy Union and the long-term Union greenhouse gas emissions commitments consistent with the Paris Agreement, and, in particular, of the targets and objectives in the field of greenhouse gas emission reduction, energy from renewable sources and energy efficiency.

The Energy Union strategy[72] has five mutually-reinforcing and closely interrelated dimensions designed to bring greater energy security, sustainability, and competitiveness:
– energy security, solidarity and trust;
– a fully integrated European energy market;
– energy efficiency contributing to moderation of demand;
– decarbonising the economy, and
– research, innovation, and competitiveness.

The key drivers of energy security are the completion of the internal energy market and more efficient energy consumption. It depends on more transparency as well as on more solidarity and trust between the Member States.

Is the current governance model a number of energy-related matters are coordinated at the EU level functionally (e.g. Integrated National Energy and Climate Plans, trans-European energy infrastructure) and institutionally (ACER, ENTSO, EU DSO, Electricity Coordination Group, Gas Coordination Group).

In light of the above, we are inclined to accept the view that "in an integrated European energy market, security of supply and efficient market functioning are no longer exclusively a national consideration, but should be addressed as

[72] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy.

a regional and pan-European issue."[73] This leads to the following conclusions that resource adequacy should be addressed and coordinated at regional and European level to maximize the benefit of the internal market and to avoid adverse distortionary effects.[74]

In answering the question of whether the current multi-actor governance model at national and Union level is adequate or whether it should evolve towards a Union-driven model, several aspects should be considered. First, a comprehensive assessment of the functioning of the energy governance model in the EU and in the Member States needs to be carried out. Second, the principle of subsidiarity should be respected. If security of supply remains a Member State responsibility, Member States must have the tools, instruments and resources to fulfil this function. Thirdly, there is a greater emphasis in Lithuania on fulfilling the functions of the existing governance model, and there are currently no clear indications that the EU governance model as a whole needs to be reviewed.

Section II: Energy solidarity, energy security and green transition

Question 1

It is challenging to envisage a climate-neutral future for the European Union that does not encompass a spirit of solidarity. The EU and all its member states have signed and ratified the Paris Agreement and are strongly committed to its implementation.[75] European Climate Law[76] sets down in legislation the EU's objective of becoming climate-neutral by 2050. This goal followed the commitment made by the EU and its member states on signing the Paris Agreement in 2015.

European Climate Law acknowledges that achieving climate neutrality should require a contribution from all economic sectors for which emissions or removals of greenhouse gases are regulated in Union law (para. 10). The transition to climate neutrality requires changes across the entire policy spectrum and a collective effort of all sectors of the economy and society, as highlighted

[73] Alberto Pototschnig and Martin Godfried, 'The Regulators' View: Capacity Mechanisms and the EU Internal Electricity Market', in: *Capacity Mechanisms in the EU Energy Markets: Law, Policy, and Economics*, eds. Leigh Hancher et al. (Oxford University Press, 2022), p. 52, doi:10.1093/oso/9780192849809.003.0002

[74] Ibid.

[75] 'Paris Agreement on Climate Change', *Consilium*, accessed 29 October 2024, https://www.consilium.europa.eu/en/policies/climate-change/paris-agreement/

[76] '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', OJ L 243, 09/07/2021, pp. 1–17.

in the European Green Deal (para. 25). According to European Climate Law (para. 34), fairness and solidarity across and within Member States (in light of their economic capability, national circumstances, such as the specificities of islands, and the need for convergence over time), should be taken into account when taking the relevant measures at Union and national level to achieve the climate-neutrality objective. The concept of energy solidarity must be embraced in order to guarantee the coherence of the process of reshaping the climate-neutral future of the Union's economy.

The alignment of climate neutrality and energy transition policy objectives is demonstrated through the approach to renewable energy. The utilisation of renewable resources mitigates the necessity for fossil fuels, facilitates the advancement of clean energy, diversifies energy supply sources and enhances energy security. From a climate neutrality perspective, a significant challenge is the complexity of the transition to clean energy in numerous industries.

The design and implementation of energy transition policies is a complex process. It is essential to consider the evolving energy trilemma when developing these policies. The trilemma addresses three areas: energy security, affordability, and sustainability. When setting energy policy, it is a constant challenge to balance these three, especially when it comes to security versus sustainability during the energy transition.[77]

In our preceding responses (see Section I), we observed that the notion of energy security has undergone a process of evolution and broadening over time. Environmental and social concerns have begun to be acknowledged as integral to the domain of energy security. As the objective of climate neutrality is being pursued and is already being implemented, this should gradually alter the conceptualisation of energy security. The pursuit of the objective of climate neutrality, given that it has been agreed that it is necessary, will also modify the concept of solidarity and its operational mechanisms.

Question 2

This EU package "Fit for 55" aims to mitigate climate change and reduce greenhouse gas (GHG) emissions by 55% by 2030 and to make Europe the world's first climate-neutral continent by 2050.

[77] 'The Energy Trilemma: What Is It and How Does It Influence EU Energy Policy – Ramboll Group', accessed 29 October 2024, https://www.ramboll.com/insights/resilient-societies-and-liveability/the-energy-trilemma-what-is-it-and-how-does-it-influence-eu-energy-policy

According NECP,[78] Lithuania will follow the objectives of the EU's energy policy which include implementation of the targets of the EU's climate change and energy policy. The balanced development of EU's renewable energy sources and energy efficiency improvement is encouraged. Obligations related to the development of local and renewable energy sources and energy efficiency improvement after 2020 will be based on the burden sharing principle, which ensures the respective contribution of each EU Member State in the pursuance of the objectives relating to renewable energy sources and energy efficiency improvement on the EU level by 2030.

Lithuania's National Energy Independence Strategy (LNEIS)[79] aims to make Lithuania a fully energy independent country by 2050 that produces energy for its own needs and exports it. Lithuania's first strategic energy objective is to ensure a secure and reliable energy supply to all consumers (LNEIS, para. 39). Energy security is guaranteed by the integration of the EU and Lithuanian energy infrastructure, markets, systems and sectors. This is achieved by developing a sustainable domestic renewable energy source generation capacity to meet energy consumption needs, maintaining and developing balancing and reserve generation capacities of the electricity system, and developing flexibility and capacities of the electricity system through the creation and implementation of the necessary mechanisms.

Lithuania is taking all necessary measures to implement EU legislation related to the "Fit for 55" package. In 2024, the Seimas approved the draft amendment to the Law on Climate Change Management[80] prepared by the Ministry of the Environment, which transposes and implements the provisions of the newly adopted European Union's "Fit for 55" legislative package into national law.[81] The law will reinforce the stipulations of the EU Emissions Trading System (EU ETS), extending it to maritime transport and, from 2027, to buildings, road transport, and additional sectors.

Lithuanian legislation aims to mitigate climate change and reduce greenhouse gases without compromising energy security. These objectives are pursued with the utmost respect for the principle of solidarity.

The achievement of ambitious climate goals and a transformation of the energy system has its consequences. The adoption of the EU Green Deal and the

[78] 'National Energy and Climate Action Plan of the Republic of Lithuania for 2021–2030'.

[79] Seimas of the Republic of Lithuania, Dėl Nacionalinės darbotvarkės 'Nacionalinė energetinės nepriklausomybės strategija' patvirtinimo, TAR 2024-06-28.

[80] Seimas of the Republic of Lithuania, 'Lietuvos Respublikos Klimato Kaitos Valdymo Įstatymo Nr. XI-329 Pakeitimo Įstatymas', TAR, 2024-06-30, Nr. 12129.

[81] Ministry of Environment of the Republic of Lithuania, 'Seimas pradeda svarstyti Klimato kaitos valdymo įstatymo pakeitimo projektą', accessed 29 October 2024, https://am.lrv.lt/lt/naujienos/seimas-pradeda-svarstyti-klimato-kaitos-valdymo-istatymo-pakeitimo-projekta/

transition will put considerable pressure on the most GHG-intensive industries in Lithuania. The three biggest GHG emitters in Lithuania (Achema, Orlen Lietuva and Akmenės cementas) are directly and indirectly responsible for more than 25 thousand jobs or 2% of total employment in the whole country.[82]

Question 3

EU regulators introduced the principle of "do no significant harm" (DNSH) to prevent myopic investment processes, which would focus on a particular environmental or social objective without sufficient consideration for other such objectives.[83] "Do no significant harm" means not supporting or carrying out economic activities that do significant harm to any environmental objective, where relevant, within the meaning of Article 17 of Regulation (EU) 2020/852.[84] In Regulation (EU) 2019/2088,[85] the definition of sustainable investment is linked to the application of the "do no significant harm" principle.[86]

In answering your question whether the evolving principle of "do no significant harm" could play a significant role in the field of energy law, it should be considered that Article 194 TFEU refers to the need to preserve and improve the environment. Under Article 11 of the TFEU, environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development. The wording of Article 194(1) TFEU establishes an explicit bridge between energy regulation and the environmental provisions of Articles 191–193 TFEU and Article 11 TFEU.[87] Consequently, Article 194(1) TFEU brings the environmental objectives and principles of Articles 191–193 TFEU and Article 11 TFEU into the realm of energy regulation, including the principles of precaution, prevention, and rectifying pollution at the source, the polluter pays principle and the principle of sustainability. This applicability

[82] 'Preparation of Territorial Just Transition Plans for Lithuania', *Trinomics*, accessed 29 October 2024, https://trinomics.eu/project/preparation-of-territorial-just-transition-plans-for-lithuania/

[83] Bloomberg Professional Services, 'What Does It Mean to "Do No Significant Harm"? | Insights', *Bloomberg Professional Services*, 4 March 2022, sec. Sustainable Finance, https://www.bloomberg.com/professional/insights/sustainable-finance/what-does-it-mean-to-do-no-significant-harm/

[84] European Commission, 'Do No Significant Harm', accessed 29 October 2024, https://knowledge4policy.ec.europa.eu/glossary-item/do-no-significant-harm_en

[85] 'Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on Sustainability-related Disclosures in the Financial Services Sector', OJ L 317, 09/12/2019, pp. 1–16, para. 17.

[86] 'Sustainable investment' means an investment in an economic activity that contributes to an environmental objectives.

[87] Laura Kaschny, 'Energy Justice and the Principles of Article 194(1) TFEU Governing EU Energy Policy', *Transnational Environmental Law* 12, no. 2 (July 2023): 270–294, doi:10.1017/S2047102523000110

was also confirmed in Austria v. Commission (*Hinkley Point*), in which the CJEU held that the Euratom Treaty does not preclude the application of the environmental principles enshrined in Articles 191(2) and 11 TFEU.[88]

EU law sets the framework for energy policy, which takes into account the need to preserve and improve the environment, including environmental principles. However, it is not clear from the question how the principle of "no significant harm" will be integrated into energy law. Consequently, it is challenging to ascertain the legal implications of this principle. Furthermore, it is not clear how this would complement or modify existing regulations. However, the current wording of Article 194, "preserve and improve the environment," is not only focused on refraining from harm, but also imposes an obligation to improve the environment. It is therefore important that the "do no significant harm" principle does not narrow the scope of the environmental objectives.

In Lithuania, environmental regulation does not set forth a separate principle of avoiding doing any "significant harm." However, there are provisions related to this concept.
The Constitution of the Republic of Lithuania,[89] adopted on 25 October 1992, became the legal basis for the establishment and development of national environmental policy. Of particular importance are Articles 53(3) and 54 of the Constitution:

> Article 53
> The State and each individual must protect the environment from harmful effects.
>
> Article 54
> The State shall secure the protection of the natural environment, wildlife and plants, individual objects of nature and protected areas and shall supervise a sustainable use of natural resources, their renewal and replenishment.
>
> The devastation of land and the subsoil, the pollution of waters and air, radioactive impact on the environment as well as depletion of wildlife and plants shall be prohibited by law.

When interpreting the provisions of the Constitution that establish the foundations of environmental protection, the Constitutional Court has stated that these provisions express one of the objectives of the State's activity – to ensure the rights of citizens to a healthy and clean environment, and that environmental protection is the concern and duty of the State and individual citizens (Constitutional Court decisions of 1 June 1998, 31 January 2011, 9 May 2014, 16 December 2015 and 30 May 2017).

[88] Ibid.

[89] Constitution of the Republic of Lithuania, accessed 29 October 2024, https://e-seimas.lrs.lt/portal/legalActPrint/lt?jfwid=x4249kwzg&documentId=TAIS.239805&category=TAD.

The Law on Environmental Protection[90] generally regulates social relations in the field of environmental protection, establishes the system of institutions operating in the field of environmental protection and their main functions, and defines the main rights and obligations of legal and natural persons in the field of environmental protection. Article 4 of the Law on Environmental Protection establishes principles of environmental protection. It is stated that environmental protection shall be the concern and duty of the State and each resident thereof. The policy and practice of the administration of environmental protection must direct public and private interests towards the improvement of the quality of the environment, encourage the users of natural resources to seek the ways and means to avoid or reduce adverse effects on the environment, and to make production ecologically safe.

A review of the Lithuanian legal framework reveals the general aspects of the principle "do no significant harm." However, there is a lack of detailed guidance on its practical application, particularly in the area of energy.

Question 4

Recent events, such as the war in Ukraine, have has highlighted the critical importance of energy resource affordability.

In accordance with Article 3(2) of the Governance regulation, the integrated national energy and climate plans shall assess the number of households in energy poverty taking into account the necessary domestic energy services needed to guarantee basic standards of living in the relevant national context, existing social policy and other relevant policies, as well as indicative Commission guidance on relevant indicators for energy poverty.

A key aspect of a sustainable internal market is the availability of energy services to all citizens in order to ensure the basic needs and health of consumers. However, Lithuania faces the problem of energy poverty, where it is difficult or impossible for residents to enjoy adequate heating of their homes or access to essential energy services such as lighting or transport.

According to Lithuania's NECP, energy poverty is caused by four main problems: energy inefficiency, high energy prices and low household incomes, as well as lack of consumer awareness. The problem of energy poverty is also reflected in energy poverty indicators:

- According to the EU income and living conditions survey, more than a quarter (27.9%) of the population could not afford adequate heating of

[90] Seimas of the Republic of Lithuania, 'Lietuvos Respublikos Aplinkos Apsaugos Įstatymas', Lietuvos aidas 1992, Nr. 20-0; Žin. 1992, Nr. 5-75.

their homes in 2018. This is the second highest rate among the EU Member States, which is much worse than the EU average of 7.4%. In Lithuania, the proportion of individuals who cannot afford adequate heating dropped by more than 11%, from 31.1% in 2015 to 20% in· 2023.
- In Lithuania, 17.1% of households spent a large part of their income on energy in 2016. This indicator shows the percentage of households in which the share of energy expenditure (electricity, gas, other fuels, heat) in disposable income was more than double the median share of energy expenditure.

EU data also point to hidden energy poverty, where households may spend too little and not acquire sufficient services. According to Statistics Lithuania, 14.9% of Lithuanian households experienced hidden energy poverty in 2016. More specifically, the indicator of hidden energy poverty shows the percentage of households whose energy expenditure was less than 50% of the median energy expenditure.

Energy poverty affects socially vulnerable groups in particular: seniors, children, people with chronic diseases, single parents, and the unemployed. Tackling this pressing social challenge requires a comprehensive political approach combining social and environmental policies.

In order to address energy poverty, the National Progress Programme 2021–2030 sets the target of "reducing energy poverty among the population," identifying three national indicators with targets for 2025 and 2030.

The LNEIS has set out Lithuania's fourth strategic energy objective, which is the availability of energy resources to consumers.

Access to energy supply is a basic service that should be available to all. Those who lack the financial means to access this service must be provided with support measures. In response to energy price spikes and supply disruptions, EU Member States have taken unified action to enhance the protection of the EU wholesale energy market and combat manipulation. This has involved strengthening transparency and oversight mechanisms within the wholesale energy market, as well as creating conditions for market reform.

To achieve the objective of making energy resources available to consumers, the following principles must be applied:

(a) Priority must be given to promoting energy efficiency. This should be achieved through the implementation of effective and targeted measures designed to address the root causes of energy poverty. These measures should include improvements in energy efficiency, the renovation of buildings, the retrofitting of heating systems (depending on the nature of the

buildings), access to energy-efficient appliances, and access to renewable energy. Additionally, targeted measures should be introduced to improve energy affordability. These could include targeted income support, social tariffs, and temporary support for energy-poor households. It is essential that these measures do not encourage inefficient energy consumption.

(b) The implementation of smart energy metering systems that provide consumers with up-to-date data on their energy consumption, enable them to manage their energy use and benefit from advances in energy technology and digitisation.

(c) It is crucial to intensify information campaigns on energy efficiency, focusing on energy-poor households, to guarantee that these groups receive bespoke information and guidance, while leveraging energy advice networks and one-stop shops.

Solutions that can help to reduce energy poverty include the improvement of energy efficiency and the introduction of renewable energy sources. S. Gentvilas, the Minister of Environment of Lithuania, issued a statement in which he says that "Lithuania provides 100% support for the payment of credit for renovated housing and the interest on renovated housing for residents receiving a heating allowance. Additionally, vulnerable households are reimbursed for the costs of preparing and maintaining the renovation project, meaning low-income households bear no costs for the renovation."[91]

The Just Transition Fund will target the most affected regions, in Kaunas, Šiauliai and Telšiai counties, which rely on a small number of highly greenhouse-gas-intensive industrial plants. Thanks to the adoption of its Territorial Just Transition Plan (TJTP) Lithuania will receive €273 million from the Just Transition Fund (JTF) to support a just climate transition to a more attractive and greener economy.[92]

It is essential that the decarbonisation and green transformation of the energy sector is carried out in a socially fair and inclusive manner, with priority given to supporting socially vulnerable households and consumers, who will face the greatest difficulties as a result of this transformation.

[91] Ministry of Environment of the Republic of Lithuania, 'Adaptation to climate risks, a just transition and the circular economy are at the heart of discussions between Environment Ministers in Brussels', accessed 29 October 2024, https://am.lrv.lt/en/news/adaptation-to-climate-risks-a-just-transition-and-the-circular-economy-are-at-the-heart-of-discussions-between-environment-ministers-in-brussels/

[92] European Commission, 'EU Cohesion Policy: €273 Million for a Just Climate Transition in Lithuania', accessed 29 October 2024, https://ec.europa.eu/regional_policy/whats-new/newsroom/14-12-2022-eu-cohesion-policy-eur273-million-for-a-just-climate-transition-in-lithuania_en

Question 5

On 1 January 2022, the revised Guidelines of the European Commission on State aid for climate, environmental protection and energy entered into force, extending the scope of the previous Guidelines to new areas in order to achieve the goal of reaching climate neutrality by 2050. The compatibility test requires the Commission to assess whether the aid helps develop certain economic activities (positive condition) and does not affect trading conditions to an extent contrary to common interests (negative condition).[93]

It is not explicitly stated in the Guidelines that the solidarity test should be applied, nor is it specified how it should be applied. However, following the Court's clarification in the *OPAL* case that energy solidarity principle, like general principles of EU law, constitutes a criterion for assessing the legality of measures adopted by the EU institutions, this is a potential area of concern that should be addressed.

Question 6

At the same time, the provisions of this Regulation should not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, in accordance with Article 194 TFEU (para. 8 of the preamble to the Regulation (EU) 2022/869).

Article 4 of the Regulation establishes criteria for the assessment of projects by the Groups. Under Article 4(2) a project of mutual interest shall meet the general criteria. "Security of supply based, *inter alia*, on diverse sources, co-operation and solidarity" as criteria is set forth in Article 4 (2)(e)(ii). The term "solidarity" is used in Article 16(6)(c), 18(2)(a), 18(4).

It is evident that there are endeavours to integrate energy solidarity considerations into the Regulation.

Question 7

The LNEIS indicates that decarbonisation will encompass nearly all areas, with dedicated sections for the heat and transport sectors.

[93] EUR-Lex, '2022 guidelines on State aid for climate, environmental protection and energy', accessed 29 October 2024, https://eur-lex.europa.eu/EN/legal-content/summary/2022-guidelines-on-state-aid-for-climate-environmental-protection-and-energy.html

The LNEIS has identified four priority areas: reducing the impact on climate change and ambient air pollution, reliability, competitiveness and involvement of the country's businesses in the efforts towards energy progress. Those four areas correlate directly with the main dimensions of the National Plan identified in the Governance of the Energy Union Regulation: decarbonisation, energy efficiency, energy security, internal energy market and research, innovation and competitiveness.

Under the Paris Agreement, Lithuania together with the EU and its Member States, has made a binding commitment to reduce GHG emissions from all sectors of economy by at least 40% by 2030, compared to 1990, using EU's internal efforts. According to Lithuania's NECP Lithuania is implementing GHG emission reductions on the basis of the National Strategy for the Climate Change Management Policy, which sets short-term (until 2030), indicative medium-term (until 2040), and long-term (until 2050) targets and objectives for climate change mitigation.

In sectors covered by the EU Emissions Trading System (EU ETS), in which Lithuanian operators participate together with operators from other EU Member States participating in the EU ETS, emissions must be reduced by 43% compared to the 2005 levels.

Non-ETS sectors (transport, agriculture, waste management, industrial enterprises engaged in other activities or fuel burning installations with boilers with installed capacity below 20 MW (small district heating enterprises), public sector buildings, households, fisheries, construction, services and other sectors) will have to comply with Lithuania's annual emission reduction limits (tCO2eq) and achieve at least a 9% reduction in 2030 compared to 2005.

The primary drivers of change in the heat supply sector up to 2050 will be the increased energy efficiency of buildings, the transition towards environmentally friendly technologies (e.g., heat pumps), and the growing utilisation of RES technologies. One of the fundamental principles of decarbonising the transport sector is the effective integration of alternative fuels, ensuring a technology-neutral energy mix.

It is advisable to construct carbon capture facilities in companies whose production processes make it unfeasible for them to achieve climate neutrality targets and who have no other options for decarbonisation. These facilities should be located in major biofuel and waste incineration facilities, as well as in areas where several sources of biogenic carbon dioxide are concentrated.

Lithuania has the potential to produce other hydrogen derivatives, such as ammonia, which could contribute to both national decarbonisation targets and the export of energy products. There is also an opportunity to increase industrial electrification and decarbonisation (the use of hydrogen and hydrogen derivatives in industry).

In the context of decarbonisation and energy transition, to guarantee the security of the energy system is one of the most crucial priorities. The transition to a decarbonised energy system presents new challenges in ensuring energy security. For example, by transitioning from fossil fuels to renewable energy sources, a country can become energy self-sufficient, reducing its reliance on external suppliers and enhancing its energy security. However, decarbonisation also presents challenges. In particular, electricity grids have been designed to accommodate consistent energy flows, making the integration of renewable energy sources a significant challenge in terms of grid integration and maintaining energy balance within the grid.

Question 8

Article 194 (2) TFEU also contains a rule regarding the right of the Member States to be free in choosing their energy sources or energy supply structure. This freedom is restricted by the environmental competence of Article 192 (2) (c) TFEU. That provision allows the EU to adopt measures significantly affecting a Member State's choice between different energy sources and its energy supply structure when deciding unanimously.[94] This particularly raises questions regarding the limits to EU measures that aim to promote the decarbonisation of the energy transition and the development of renewable energy sources.[95]

The Court was confronted with this exact question in *Poland v. Parliament and Council* (Case C-5/16).

However, the Court held that environmental policy objectives inherently affect Member States' energy sectors and that recourse to the special legislative procedure may be relied upon only in cases where the "primary outcome sought by that measure" is to significantly affect a Member State's choice of energy source and its general structure of energy supply. Moreover, as a derogation and competence limitation, Article 192(2)(c) is to be interpreted narrowly, es-

[94] Renate Pirstner-Ebner, European Energy Law Market System for Electricity and Gas – Energy Supply Security – Green Energy System of the Future (Green Smart Grid, Nomos, doi.org/10.5771/9783748913627

[95] Laura Kaschny, 'Energy Justice and the Principles of Article 194(1) TFEU Governing EU Energy Policy…'

pecially as questions of environmental policy cannot ignore energy concerns. A broader interpretation of Article 192(2)(c) and Article 194(2) TFEU by analogy would render EU energy policy measures extremely limited and reduce the ability to address the promotion of renewable energy sources.[96]

Question 9

The LNEIS objective is to ensure that Lithuania produces as much energy as it consumes and that the energy sector becomes fully climate neutral by 2050. In order to achieve the Lithuanian energy vision, the strategic energy target is to achieve climate neutrality for Lithuania and the region. To achieve the objectives set out in the Green Deal Lithuania will transition to climate-neutral energy sources exclusively. The development of renewable energy sources (RES) will continue, both offshore and onshore, as will the assessment of new sources of electricity generation. The necessary infrastructure for electricity generation will be developed in Lithuania to enable the export of energy products. The transition to climate-neutral energy sources and the use of alternative fuels will be promoted across a number of sectors, including heat generation, transport, industry and others. By 2030, a positive energy balance in the electricity sector must be achieved, ensuring that the country generates more electricity than it consumes. The ultimate goal is a climate-neutral energy sector based on indigenous energy production by 2050.

The sources of energy production will consist of renewable energy sources and technologies that ensure the production of energy without polluting the environment. The LNEIS defines aim is to further increase the share of RES in Lithuania's domestic electricity generation and final electricity consumption balance until it reaches 100%, thus reducing dependence on fossil fuel import and increasing domestic electricity generation capacity. It is estimated that 10 GW of onshore wind power plants and 9 GW of solar photovoltaic power plants will be developed by 2050. Lithuania plans to build enough electricity generation facilities to become an exporter of energy products, especially with a particular focus on hydrogen, by year 2050. Consumers will be enabled to produce their own energy to meet their needs.

As indicated by the data provided by the electricity transmission system operator, the most significant advancement in the electricity sector has been achieved in 2023. In 2023, local electricity production increased by 75.78 % (from 3.22 to 5.66 TWh) in comparison to 2018. This accounted for 45% of total electricity demand in Lithuania.[97] This represents a significant shift,

[96] Ibid.

[97] The data on renewable energy is provided in the recast LNEIS, 2024.

given that in 2018 local electricity generation accounted for just 25.05% of total electricity demand in Lithuania.

Electricity production growth was driven by the increased capacity for renewable energy sources in Lithuania. In 2023, compared to 2018, the production of wind and solar power plants increased by 159% and reached 3.16 TWh. Most electricity in 2023 was produced by wind power plants – 2.52 TWh, or 121% more than in 2018, but the highest growth was recorded in the production of solar power plants, which reached 0.63 TWh, or almost 7 times more than in 2018. The installed capacity of wind power plants in 2023 increased from 533 MW in 2018 up to 1,228 MW, and solar power plants – from 82 in 2018 up to 1,108 MW. The aggregate installed capacity of wind and solar power plants has increased by approximately threefold.

The NECP set out that the sources of energy production will consist of renewable energy sources and technologies that ensure the production of energy without polluting the environment.

Question 10

The EU is taking action to reduce its dependence on fossil fuels (especially natural gas). The use of renewable energy requires the input of rare metals and other materials that the EU does not have at its disposal, which creates new dependencies. The scarcity of resources emphasises the need to diversify energy supplies and to enhance trade relationships with worldwide partners. In response to Question 6, Section I we outlined the measures that have been implemented at the EU level.

The Federal Republic of Germany brought to the Court an action on the basis of Article 263 of the TFEU for partial annulment of Council Decision 2014/699/EU of 24 June 2014 establishing the position to be adopted on behalf of the European Union at the 25th session of the OTIF Revision Committee as regards certain amendments to the Convention concerning International Carriage by Rail (COTIF) of 9 May 1980, as amended by the Vilnius Protocol of 3 June 1999, and to the Appendices thereto.[98] The European Union is a party to COTIF. In its judgment of 5 December 2017, the ECJ dismissed the action brought by the Federal Republic of Germany.

The main problem in the case was the interpretation of Article 218(9) of the TFEU in the context of its application to international agreement with shared

[98] Judgment of the Court (Grand Chamber) of 5 December 2017. *Federal Republic of Germany v Council of the European Union*, Case C-600/14.

competence. The Court was to determine whether, for the stage of implementation of international agreement with shared competence, the existence or nature of the EU competence is of a decisive character. The existence of EU (shared) competence is sufficient not only for the EU to become a party, but also for execution of rights and obligations under international agreement with shared competence.[99]

In other words, the existence of the EU external competence is a decisive factor for the conclusion and execution of an international agreement. If the EU shares competence with the Member States over the whole agreement, it may be concluded by the EU only. Moreover, as follows from the commented judgment, the EU may also be the only entity empowered to make decisions at the stage of the implementation of an international agreement with shared competence. This is supposed to be the way to get rid of problematic mixity in EU external relations.[100]

The conclusion of agreements as "mixed," that is jointly by the European Union and its Member States, is a legal phenomenon peculiar to the EU legal order. It is a consequence of the *sui generis* nature of the Union: unlike intergovernmental organisations, the Union has been granted extensive internal and external competences by the Treaties which, in certain areas, are (or may become) exclusive. Essentially, two main forms of mixity are distinguished: facultative mixity and obligatory mixity. In conclusion, COTIF has made it clear that the Court had by no means intended to reject the idea of facultative mixity. Insofar as an agreement does not include areas subject to Member States' exclusive competences, the EU may conclude it as EU-only or mixed, that choice normally falling within the political discretion of the Council. [101]

Given the EU's reliance on external suppliers in energy sector, there is a strong case for a unified negotiating position, which would enhance both the terms of acquisition and the position of individual countries. This is corroborated by the case law of the Court, which acknowledges the competence of the EU institutions to conclude international agreements.

Question 11

The "REPowerEU" will address challenges related to green transformation, with a particular focus on reducing GHG emissions, including in the transport sector.

[99] Monika Niedźwiedź, 'Case C-600/14 Germany v Council (OTIF)', *Polish Review of International and European Law* 8, no. 1 (2019): 141–164, doi:10.21697/priel.2019.8.1.07

[100] Ibid.

[101] Luca Prete, 'Some Thoughts on Facultative and Obligatory Mixity after Singapore and COTIF, and before CETA', *Verfassungsblog*, 13 October 2018, doi:10.17176/20181017-093930-0

It will also look at ways to increase energy efficiency in buildings and transport, and to stimulate the creation of additional electricity generation capacity from renewable energy sources. The total budget for this is EUR 747.56 million.[102]

On 30 June 2023, Lithuania submitted a modified national RRP, including a REPowerEU chapter in accordance with Article 21c of Regulation (EU) 2021/241, to the Commission.[103] In component 8 (REPowerEU), Lithuania proposed to add an investment consisting of the implementation of a financial instrument to promote the deployment of renewable energy.

The REPowerEU chapter includes one reform and three investments. 1) The reform (H.1.3.) aims at improving the investment environment for developers of renewable energy sources. In particular, the reform aims at streamlining and speeding up permitting and other administrative processes, including by reducing the number of required permits, shortening the timeframe for obtaining them and regulating hybrid power plants. 2) The REPowerEU chapter increases the funding for renovation of multi-apartment buildings, which improves the energy efficiency of buildings and reduces heating costs for residents. 3) The third investment (H.3.1.) consists of loan support to business entities (including public entities engaged in similar activities as the private entities) to invest in projects supporting the creation of additional renewable energy sources generation capacity (solar and wind).

Section III: The EU's crisis management in the field of energy and its limits

Question 1

Concerning the relationship of Article 194 (1) (b) TFEU and Article 122 TFEU, the latter has the quality of a "*lex specialis*."[104] This provision allows adopting measures outside ordinary legislative procedure should severe difficulties in the energy supply arise. In this case, the council can issue appropriate measures "in a spirit of solidarity. Here, the parliament is not involved, ensuring a rapid procedure in the event of an energy supply crisis.[105]

[102] 'Apie planą „Naujos kartos Lietuva"', *2021-2027 ES investicijų interneto svetainė*, 24 November 2021, https://www.esinvesticijos.lt/2021-2026-m-planas-naujos-kartos-lietuva/apie-plana-naujos-kartos-lietuva

[103] European Commission, 'Proposal for a Council Implementing Decision Amending Implementing Decision (EU) (ST 10477/21 INIT; ST 10477/21 ADD 1) of 20 July 2021 on the Approval of the Assessment of the Recovery and Resilience Plan for Lithuania', accessed 29 October 2024, https://commission.europa.eu/document/download/0b6328cb-4217-4294-b613-8435ecd4005a_en?filename=COM_2023_685_1_EN.pdf

[104] Renate Pirstner-Ebner, *European Energy Law Market System for Electricity and Gas – Energy Supply Security – Green Energy System of the Future (Green Smart Grid,* Nomos, doi.org/10.5771/9783748913627

[105] Ibid.

Given the severe difficulties in the supply of certain products as outlined in Article 122 of TFEU, it is reasonable to conclude that this article should be applied in particular to those cases.

Question 2

While energy solidarity does not eliminate the EU's energy dependence, it is an effective tool to increase the EU's resilience and improve its ability to cope with emerging crises. The EU's main dependence on fossil fuels comes from Russia, and the EU's renewable energy development also requires rare metals, the extraction of which is controlled by non-democratic states.

Question 3

The Treaties provide a succinct overview of the Union's energy crisis management measures. The actual construction and functioning of these measures are most clearly reflected in the implementing mechanisms (secondary EU law), the actions of the EU institutions and the involvement of Member States.