

EU Energy Solidarity as a Way of Implementing Just Transition in Energy Policy

by

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Abstract

The principle of EU energy solidarity, regulated by Article 194 of the Lisbon Treaty, has created a new dimension of energy sector developments. Initially, it was treated as an abstract, purely political concept with no particular normative significance. However, the CJEU judgment in the OPAL case established energy solidarity as a principle of EU law, deriving, *inter alia*, from the principle of justice. The concept of *just* transition, based on the same foundations of justice, creates directions for socio-economic transformation based on a sustainable and low-carbon economy.

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Energy solidarity is, in fact, a way of implementing the assumptions and directions of the development of *just* transition, based on normative premises ensuring energy security, economic competitiveness and sustainable development.

Résumé

Le principe de solidarité énergétique de l'UE, régi par l'article 194 du traité de Lisbonne, a donné une nouvelle dimension aux développements du secteur de l'énergie. Initialement, il était considéré comme un concept abstrait, purement politique, sans signification normative particulière. Cependant, l'arrêt de la CJUE dans l'affaire OPAL a fait de la solidarité énergétique un principe du droit de l'UE, découlant, entre autres, du principe de justice. Le concept de transition juste, basé sur les mêmes fondements de justice, crée des orientations pour la transformation socio-économique basée sur une économie durable et à faible émission de carbone. La solidarité énergétique est en fait un moyen de mettre en œuvre les hypothèses et les orientations du développement de la transition juste, sur la base de prémisses normatives garantissant la sécurité énergétique, la compétitivité économique et le développement durable.

Key words: energy solidarity; just transition; internal market; energy policy; sustainable development; competition.

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I. Introduction

Just transition refers to a systemic approach to economic transformation that ensures a transition to a low-carbon economy in a sustainable manner, minimising negative impacts on society and the environment. *Just* – as in ‘fair’ – transition is a process aimed at changing the socio-economic model, towards one where political, social and economic aspects are taken into account. This holistic approach has a multifaceted dimension. From the point of view of the **geographical scope** of influence, one can speak of a global, regional, national or local dimension. Each has its own conditions, goals, and means of achieving them. Although global strategy sets certain directions, national and regional measures, such as those within the European Union, are key. Within these frameworks, conditionality is important, because it determines what needs to be achieved and by what means. National specifics depend on a number of variables, namely the level of economic development, the structure of the economy, the shape of the labour market, and social and environmental challenges. The sector in which the economic activity takes

place is also important, as its operation is based on specific conditions and therefore the determinants of its functioning and development aimed at a just transition may be different.

The development of the energy sector in the European Union (EU)¹ is also characterised by such special conditions.² The quest for clean and safe energy, as well as consumer protection, has been the rationale behind the development of EU policy for the energy sector since the beginning of the current EU. Energy solidarity was neither explicitly stated in binding EU acts, nor in practice as a principle of EU energy law or policy. The Lisbon Treaty uses the concept of a “spirit of solidarity between Member States”, which was seen as a political goal. Importantly however, the Court of Justice of the European Union (hereinafter: CJEU) ruled in the *OPAL case* (C-848/19P) that solidarity is an underlying legal principle of EU energy policy. This ruling has significantly changed the perception of this principle, also having relevance to the implementation of the *just* transition concept.

The aim of this article is to confirm the claim that EU energy solidarity is a way of implementing the *just* transition concept. The determinants of energy solidarity, that is, security, competition or sustainability, govern how it is implemented. In order to achieve its goal, this article is divided into four parts. The first introduces the concept of *just* transition. In the second, the determinants of *just* transition in EU energy policy are outlined. The third part presents the concept of energy solidarity, based on the EU system framework. In the fourth part, the determinants of EU energy solidarity and their relevance from a *just* transition perspective are noted. The results of these analyses are summarized in the conclusions.

¹ The European Union (EU) was created by the Maastricht Treaty, which entered into force on 1 November 1993. It is the result of the transformation of the European Economic Community (EEC), which had been created by the Treaty of Rome in 1957, and subsequently renamed the European Community (EC). For the sake of simplicity, this article adopts a uniform name encompassing all iterations of this international organisation – “European Union” or “EU”, without distinguishing between the changes that have occurred in the historical process. These issues are important, but not of major relevance to this paper.

² Robert Zajdler (2020), *The role of capacity in the EU internal electricity market in the context of the General Court's judgment of 15 November 2018 in case T-793/14 2020 Tempus Energy* (2020) 143 Energy Policy; Dorota Chwieduk and Robert Zajdler, ‘Clean energy transition in NEB’ in Robert Zajdler (eds), *Solutions for Modern Society of the Future. The New European Bauhaus Manual* (WUT Publishing House 2023).

II. The essence of Just Transition

There are many definitions that refer to different aspects of *just* transition. By analyzing them, one may be tempted to identify four key elements around which conceptual models of *just* transition are built – public support, funding, social support, economic benefits.

Public support means creating a legal and policy framework for targeted actions. The creation of this framework takes place within several areas: industrial policy, including energy policy in particular, employment policy, education policy, or financial policy. **Industrial policy** focuses on supporting and promoting the development of low-carbon economic sectors. This can include incentives for companies to invest in sustainable technologies, support for research and development, and the promotion of production patterns with lower environmental impact. Within, **energy policy** provides mechanisms to support the energy transition – the move away from fossil fuels, towards more environmentally and climate-friendly ways of producing, transporting and consuming fuels and energy.

Energy policy includes targets for renewable energy sources, energy efficiency, reduction of greenhouse gas emissions, and support for innovative low-carbon technologies. **Employment policies** ensure that the transition does not lead to massive job losses. **Education policy** focuses on promoting knowledge of sustainability, low-carbon technologies and environmental protection. **Financial policy** means financial support from the state to stimulate investment in low-carbon technologies and economic transformation projects. These elements of public support are essential for the successful implementation of *just* transition that takes into account the whole economy, and aims to achieve sustainable development and environmental protection. All this requires the creation of appropriate regulations at regional, national or European Union level in order to support sustainable development, and reduce the impact of carbon-intensive sectors on the functioning of the economy and societies.

Dedicated funding for equitable transformation means allocating specific funding or resources to support the transformation of the economy towards sustainable, low-carbon development, which minimizes negative impacts on workers and communities that depend on carbon-intensive sectors. This is important because transformation, and the fight against climate change, require significant investments in new technologies, infrastructure, vocational training and social support. Appropriate allocation of financial resources for related purposes helps to accelerate the transition process, increase the efficiency of relevant actions, and balance environmental goals with the protection of

communities and jobs. This can include a variety of funding models, such as: public funds; support from international funds; financial mechanisms such as fees and taxes that offset the final cost of a good or service taking into account its climate impact; or public-private partnerships. The latter are collaborations between the public and private sectors that allow funding to be focused on investments related to low-carbon technologies and social projects.

Social support refers to the formation and engagement of strong, diverse coalitions (alliances) between different stakeholders meant to realize equitable economic and social transformation. Such coalitions bring together diverse groups and organizations that share common goals and aspirations. These can take the form of: cross-sectoral partnerships, inclusion of workers and local communities, or cooperation at regional and international levels.³

Economic benefit means building diversified economic opportunities, that is, seeking and promoting diverse economic opportunities for companies investing in the transformation towards a sustainable model. It can consist of introducing innovative technologies and developing economic sectors relevant to *just* transition – renewable energy, energy efficiency, recycling, electromobility and sustainable agriculture. It can consist of supporting entrepreneurship and innovation, by encouraging the development of entrepreneurship and innovative solutions. This can be combined with the development of local initiatives. Local communities may have a variety of resources and potential that can be harnessed in the transformation process.⁴ Economic benefits can come from the development of projects by companies that ensure a collaboration with local communities, and/or local entrepreneurs. This means seeking diverse and sustainable economic development pathways, which minimize the negative impacts of transformation, as well as balance economics with environmental and climate protection.

³ Interesting aspects of social contracts, see: Raphael J Heffron and Louis De Fontenelle 'Implementing energy justice through a new social contract' (2023) 41(2) *Journal of Energy & Natural Resources Law* 141; Aspect related to education: Raphael J Heffron and others, 'Pathways of scholarship for energy justice and the social contract' (2023) 41(2) *Journal of Energy & Natural Resources Law* 211.

⁴ Interesting aspects of the business approach model, see: Maciej M Sokołowski and Madeline Taylor, 'Just energy business needed! How to achieve a just energy transition by engaging energy companies in reaching climate neutrality: (re)conceptualising energy law for energy corporations' (2023) 41(2) *Journal of Energy & Natural Resources Law* 157; Raphael Heffron and others, 'The identification and impact of justice risks to commercial risks in the energy sector: post COVID-19 and for the energy transition' (2021) 39(4) *Journal of Energy & Natural Resources Law* 439.

III. The importance of energy for just transition

Therefore, *just* transition is an umbrella term for a certain model of socio-economic transformation, including the energy sector. The mere fact that the concept is relatively recent, both in legal acts and policy documents, does not mean that this way of thinking and acting has been alien to the European Union.

An analysis of historical documents shows that the development directions of the current EU are rooted in a number of documents dating from the 1960s and 1970s, where the directions of EU development were noted.⁵ They pointed to the need for clean and safe energy, consumer protection, or building the communities international position.⁶ The foundations for the EU's current *just* transition efforts began in the late 1980s and early 1990s, with the creation of the legal basis for environmental and climate protection action within the Treaty, and intensified after the Lisbon Treaty came into force. The energy transition currently underway is a natural continuation of these processes. A certain model of thinking about transformation, including energy transformation, is closely linked to the EU's model of socio-economic development. Sensitivity to social and environmental aspects has been present in its thinking, in many cases practically from the beginning of the current EU.

In this context, the question thus arises as to what has changed. First, the distribution of burdens on different aspects of socio-economic activity has changed. Second, environmental-climatic aspects have gained in importance as a key aspect of the direction of socio-economic development. The key directions

⁵ Terence Daintith and Leigh Hancher, *Energy Strategy in Europe: The Legal Framework* (De Gruyter 1986) 148–149; Kim Talus, *EU Energy Law and Policy, A Critical Account* (Oxford University Press 2013); N Green, 'The implementation of Treaty Policies: the energy dilemma' (1983) 8 EL Rev; Marcin Nowacki, *Prawne aspekty bezpieczeństwa energetycznego w UE* (Wolters Kluwer Polska 2010); Robert Zajdler, (2019), *Electricity and natural gas market network codes in the legal order of the post-Lisbon European Union*, Publishers (WUT Publishing House 2019).

⁶ Bartłomiej Nowak, *Energy Policy of the European Union. Chosen legal and political aspects and their implications for Poland* (Wydawnictwa Akademickie i Profesjonalne 2009); Barry Barton and others, *Energy Security – Managing Risk in a Dynamic Legal and Regulatory Environment* (Oxford University Press 2004); Mirosław Pawelczyk (eds), *Współczesne problemy bezpieczeństwa energetycznego. Sektor gazowy i energetyczny* (Ius Publicum 2018); Christopher Jones (eds), *EU Energy Law Volume I: The Internal Energy Market – The Third Liberalisation Package* (3rd edn, Edward Elgar Publishing Limited 2010); Jones, (eds), *EU Energy Law Volume XI: The Role of Gas in the EU's Energy Union* (1st edn, Edward Elgar Publishing 2017); Leigh Hancher and Francesco Maria Salerno, 'Energy Policy after Lisbon' in Andrea Biondi, Piet Eeckhout and Stefanie Ripley (eds), *EU Law After Lisbon* (Oxford University Press 2012) 368; Hancher and Adrien de Hauteclouque, 'Manufacturing the EU Energy Markets, The Current Dynamics of Regulatory Practice' (2010) 11(3) Competition and Regulation in Network Industries 307.

of this change were initiated in a comprehensive EU policy – the **European Green Deal**.⁷ Its strategic objective was to implement the UN 2030 Agenda for Sustainable Development, under the 5 goals (people, planet, prosperity, peace, partnership), to strengthen international action on climate change, and to facilitate EU leadership in this aspect. This is the EU's horizontal strategy aiming to create a zero-carbon economy by 2050. Within, actions should be taken primarily in the areas of: creating ambitious climate targets for 2030 and 2050; creating a regulatory framework to ensure the provision of clean, affordable and secure energy; preparing industry for a circular economy; increasing energy efficiency and energy savings in construction in order to move towards sustainable and intelligent mobility; creating a fair, healthy and environmentally friendly food system (“from farm to fork”); protecting and restoring ecosystems and biodiversity; as well as ensuring zero emissions for a non-toxic environment.

Exporting such a thinking model to other countries outside the EU, including other continents, is also part of the European Green Deal. This “exportation” is supposed to be a certain model for the development of the EU, and a suggestion of what direction other countries might take, for instance, African States. Its adoption is to be combined with EU support for such processes. This kind of thinking raises the issue of what *just* transition models actually are. For it is not a policy that can be “brought in the backpack”, but must be a natural part of the socio-economic evolution of local communities. Hence, the discussion takes place in terms of *just* transition models, and is only indirectly relevant for the purposes of this article. It is relevant to the extent that, regardless of the locally adopted solutions, *just* transition must be the result of a deliberate and socially accepted change and requires solidarity. Instead, the aim of this article is to show that the principle of EU energy solidarity is, in fact, a means of realizing *just* transition, which now forms the framework for its application in practice.

What emerges from the above is a picture of a multifaceted approach to so-called “*just* transition”. The social aspect of transformation has been taken into account by the EU since its inception. Historically, the essence of the EU is based on strengthening the role of society in the integration process. A certain additional element was the aspect of transformation, which includes climate-environmental aspects, which developed since the early 1980s and gained great importance in recent years. A *just* transition is, in fact, an increased sensitivity to certain aspects within the following socio-economic

⁷ Francesca Colli, *The EU's Just Transition: three challenges and how to overcome them, European Policy Brief* (Egmont Institute 2020) <www.jstor.org/stable/resrep24705> accessed 5 September 2023; Heffron ‘Energy law for the next generation, towards 2030 to 2050’ (2023) 41(2) *Journal of Energy & Natural Resources Law* 131.

changes. It is defining a certain set of designations separately, and directing further socio-economic development towards strengthening in this direction. The mechanism for achieving these goals in energy is the principle of EU energy solidarity, which is both the heart and the brain of these changes.

A key industry for *just* transition is precisely the energy sector, due to its socio-economic impact, but also because it is one of the main sources of greenhouse gas emissions. Both the production of electricity and the use of fuels in the economy cause emissions of GHGs and negatively affect the environment and human health. Its transformation towards low-carbon energy sources, energy efficiency and distributed generation is the direction of transformation.

However, the impact of this sector is not only on climate, but also other aspects of the environment, namely soil, water, air, biodiversity, noise or landscape. In each of these, there is an environmental impact of energy, which is, in many areas, negative as the damage it generates causes environmental degradation. However, continued energy production is a necessity, which implies the so-called economic use of the environment. Hence, the essence of *just* transition in the energy sector is to strike the right balance and create mechanisms that will ensure that energy needs are met in a more sustainable manner in the long term.

Energy transition is opening up new employment opportunities in sectors related to increasingly more sustainable energy generation, transport and use technologies. Investment in the development of these sectors creates new jobs, requiring different skills and qualifications. A *just* transition offers opportunities for workforce retraining and community development. Finally, there are many regions with communities whose economies and employment options are closely linked to fossil fuel-based energy sectors, such as coal mining or the oil industry. Withdrawal from these sectors can have negative social impacts, including job losses and economic hardship. A *just* transition requires a specific look at these conditions, taking action against energy poverty.

IV. The concept of solidarity in the EU

To define what energy solidarity is, it would first be necessary to define what solidarity is in European Union law since the solidarity principle lies at the heart of the EU legal system⁸.

⁸ See more: Markus Kotzur, 'Solidarity as a Legal Concept' in Andreas Grimm and Susanne M Giang (eds), *Solidarity in the European Union, A Fundamental Value in Crisis* (Springer 2017); Peter Hilpold, 'Understanding solidarity within EU law: An analysis of

According to Article 2 TUE

“The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail.”

According to Article 3(3) TEU,

“(…) It shall promote economic, social and territorial cohesion, and solidarity among Member States. (…)”.

Solidarity is a rationale for the common development of the Member States within the EU. Its essence comes down to a case-by-case confrontation and balancing of interests, by the Member States and the EU, in the process of making and applying laws in line with social expectations. It obliges Member States to cooperate within the EU, and places a general obligation on the EU and Member States to consider the interests of other actors in the exercise of their respective competences. In this context, the development of the EU, which would take the form of *just* transition, is nothing other than a development that fulfills all those objectives referred to in Article 2 TEU (above). In turn, the implementation of these objectives is to be carried out, *inter alia*, in a manner of solidarity.

In this context, there have been divergences in doctrinal assessment as to how much solidarity is merely a moral or political basis for acts of EU law, and how much it is an autonomous source of rights and obligations. The multifaceted nature of solidarity has been pointed out on various occasions, requiring interpretation in line with the objectives and values of the proposed legal solutions.⁹ In the Robert Schuman Declaration of 1950, it was noted that “Europe will not be made all at once, or according to a single plan. It will be built through concrete achievements, which first create a *de facto* solidarity”.¹⁰ Solidarity is the basis of EU rules.

the “islands of solidarity” with particular regard to Monetary Union’ (2015) 34 YEL 257; Biondi A, Dagilyte E and Küçük E (eds), *The solidarity in EU Law. Legal principle in the making* (Edward Elgar Publishing 2018).

⁹ Kotzur (n 9); Hilpold (n 9); Malcolm Ross, ‘Solidarity: A new constitutional paradigm for the EU?’ in Malcolm Ross and Yuri Borgmann-Prebil (eds), *Promoting Solidarity in the European Union* (Oxford University Press 2010).

¹⁰ Robert Schuman Declaration, 9 May 1950; See also: Ben Rosamond, *Theories of European Integration* (Palgrave Macmillan 2000).

There have been views giving this principle a certain legal dimension, as part of a combination of intergovernmental and supranational regimes, which has the effect of going beyond strictly intergovernmental arrangements towards the construction of certain constitutional values within the EU.¹¹ This has caused difficulties in defining the application of solidarity in EU law. In this sense, solidarity is a concept which relates both to horizontal relationships (between Member States, between institutions, between peoples or generations, and between Member States and third countries) and to vertical relationships (between the Union and its Member States), and in a variety of areas.¹² There seems to be a consensus that solidarity as a legal concept is based on the concept of justice, which is regarded by some as a legal principle with normative effects, but seen by others as having no binding legal implications. It either creates values for legal acts, or is an enforceable legal basis as a legal principle or defined legal norm.¹³

The principle of the EU energy solidarity is expressed in Article 194(1) TFEU, whereby:

“In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to: (a) ensure the functioning of the energy market, (b) ensure security of energy supply in the Union, (c) promote energy efficiency and energy saving and the development of new and renewable forms of energy and (d) promote the interconnection of energy networks.”

Speaking of solidarity in EU energy policy, the Lisbon Treaty uses the concept of “spirit of solidarity between Member States”. When interpreting this concept, it had been pointed out that it had a general nature, and could

¹¹ Jan F Braun, ‘EU Energy Policy under the Treaty of Lisbon Rules: Between a new policy and business as usual’ (2011) 31 EPIN Working Papers <www.files.ethz.ch/isn/127164/EPIN%20WP31%20Braun%20on%20EU%20Energy%20Policy%20under%20Lisbon.pdf> accessed 5 September 2023; Irina Ciornei and Ettore Recchi, ‘At the Source of European Solidarity: Assessing the Effects of Cross-border Practices and Political Attitudes’ (2017) 55(3) *Journal of Common Market Studies* 468.

¹² Case C-848/19P *Federal Republic of Germany v. Republic of Poland* [2021] ECR II-218, Opinion of Advocate General Campos Sánchez-Bordon, para 60.

¹³ In terms of being a legal concept, see: Alicia Hinarejos, *The Euro Area Crisis in Constitutional Perspective* (Oxford University Press 2015); Hilpold (n 9). For more on the treatment of a legal concept as a legal principle, see: Catherine Barnard, ‘Solidarity and New Governance in Social Policy’ in G de Burca and J Scott (eds), *Law and New Governance in the EU and the US* (Hart Publishing 2006); Malcolm Ross, ‘SSGIs and Solidarity: Constitutive Elements of the EU’s Social Market Economy?’ in U Neergaard and others (eds), *Social Services of General Interest in the EU* (TMC Asser Press 2013). With respect to the treatment of a legal concept as having no binding legal implications, see: Marcus Klamert, *The Principle of Loyalty in EU Law* (Oxford University Press 2014).

not have been regarded as anything more than a declaration of a political kind, that indirectly materialized in specific acts of EU law. Solidarity had been only a certain value, which inspires the development of EU law, and the content of those acts. No rights or obligations could have been derived directly from it for the EU and the Member States.¹⁴

However, this historical interpretation has notably changed in recent years, due to the ruling of the Court of Justice of the European Union (CJEU) in the so-called OPAL case (case C-848/19P). CJEU stated therein that “the spirit of solidarity between Member States (...) constitutes a specific expression, in the field of energy, of the principle of solidarity, which is itself one of the fundamental principles of EU law”.¹⁵ Energy solidarity “forms the basis of all of the objectives of the European Union’s energy policy (...)”.¹⁶ For that reason, all acts adopted by EU institutions within its energy policy must be interpreted, and their legality assessed, in the light of the principle of energy solidarity. The principle of energy solidarity “can be relied on in matters of EU energy policy in the context of the establishment and functioning of the internal market in natural gas”.¹⁷ And the principle of solidarity itself should not be equated with energy security aspects only, but with all EU energy policy objectives, as set out in Article 194(1) TFEU.¹⁸

This principle means that the EU and the Member States must strive, in the exercise of their powers conferred upon them by that policy, to avoid taking measures which could damage the interests of the EU and of its other Member States. It requires the creation of balance between different interests.¹⁹ The CJEU has clearly indicated that the “spirit of solidarity between Member States” stated in Article 194(1) TFEU is part of the general principle of

¹⁴ Ruven Fleming, ‘A legal perspective on gas solidarity’ (2019) 124 *Energy Policy* 102, 107; Pieter van Cleynebreugel, ‘Typologies of solidarity in EU law: a non-shifting landscape in the wake of economic crises’ in Andrea Biondi, Eglė Dagilyte and Esin Küçük (eds), *The solidarity in EU Law. Legal principle in the making* (Edward Elgar Publishing 2018), 25, 36; Nicolas E Farantouris, ‘La Nouvelle base juridique de la politique énergétique de l’UE’ (2011) 599 *Revue de l’énergie* 18; Rafael Leal-Arcas and Andrew Filis, ‘Conceptualizing EU Energy Security Through an EU Constitutional Law Perspective’ (2013) 36(5) *Fordham International Law Journal* 1225; Kaisa Huhta, ‘Too important to be entrusted to neighbours? The dynamics of security of electricity supply and mutual trust in EU law’ (2018) 43 *EL Rev* 920, 927; Johann-Christian Pielow and Britta Janina Lewendel, ‘Beyond “Lisbon”: EU competences in the field of energy policy’ in Bram Delvaux, Michael Hunt and Kim Talus (eds), *EU Energy Law and Policy Issues* (3rd vol, Intersentia 2011).

¹⁵ Case C-848/19P *Federal Republic of Germany v. Republic of Poland* [2021] ECR II-598, para 38.

¹⁶ *Ibid.*, para 41.

¹⁷ *Ibid.*, para 46.

¹⁸ *Ibid.*, para 47.

¹⁹ Case T-883/16 *Republic of Poland v European Commission* [2019] ECR II-567, para 77.

solidarity, which is one of the principles of EU law. This principle relates thus to the regulation of energy policy in all its aspects, and not only to energy security issues, extending to, for example, climate change, environmental protection or competition. However, the CJEU did not specify the application principles of the principle of energy solidarity.²⁰

However, what derives from the above is that the concept of energy solidarity must take into account socio-economic development considerations, such as: human dignity, freedom, democracy, equality, rule of law, and the respect of human rights, including the rights of minorities. These values are common to the societies of EU Member States, which are shaped by pluralism, non-discrimination, tolerance, justice, solidarity and the equality of genders. Furthermore, the concept of energy solidarity must also consider economic, social and territorial cohesion, as these are the basis of the development of the EU.

V. Determinants of just transition

Therefore, energy solidarity brings together all those aspects of *just* transition that are relevant to socio-economic development. It provides a certain normative dimension for transformative solutions aimed at *just* transition. At this stage, however, the question arises of what conditions such *just* transition should have in the EU energy sector. These conditions can be divided into three groups, which relate to the different premises of energy development in the EU – security, competition and sustainability.

1. Security

According to Article 194(1) TFEU, security is understood as “*ensuring security of energy supply in the Union*”. The key here is the consumer and their expectations regarding the continuity of supply and its affordability. This provision does not refer to the security of individual EU Member States, but that of the EU. At the same time, the interdependence between EU Member States is part of security understood as such. Improved energy security lies in a more collective approach, through the functioning of the internal market

²⁰ The relevance of indicating the scope of that principle was pointed out by Advocate General Sanchez-Bordony in his opinion, noting that “the obligation to rule on the existence of the principle of solidarity and, possibly, on its nature and scope”, see *Federal Republic of Germany* (n 15), para 5.

and greater cooperation among Member States. This rationale is particularly relevant in the context of the current geopolitical situation in Ukraine, and its resulting effects on the security and continuity of natural gas supplies (and indirectly electricity) and maintaining them at a socially acceptable price. This is evident in the measures taken to mitigate the social and economic impact of the war, where the rationale for action is the pan-European approach, resulting in the pursuit of such a course of action by the Member States.²¹

EU rules have so far introduced several mechanisms to integrate security within the energy market model, safeguarding social interests. In the wholesale market, and indirectly in the retail market, it is based on the so-called Network Codes that regulate, in a uniform way, the day-to-day cooperation between the participants of the energy market in terms of capacity allocation, congestion management, balancing, interoperability of energy systems, and data exchange.²² From the more horizontal policy perspective, EU secondary legislation supports moderating energy demand (savings, efficiency, fuel shifts); increasing internal energy production (e.g. renewable sources of energy, hydrogen); and diversifying external energy supplies, combined with increased coordination of national energy policies within the EU.²³ There are also additional measures – recently under scrutiny and being modified due to the war in Ukraine – regulating the common approach in a crisis situation.²⁴

²¹ See: Regulation (EU) 2022/1032 of the European Parliament and of the Council of 29 June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage [2022], OJ L 173, 17–33; ‘Commission, 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, 18 May 2022; Commission, ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU «Save Energy»’ COM (2022) 240 final, 18 May 2022; Commission, ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Short-Term Energy Market Interventions and Long Term Improvements to the Electricity Market Design – a course for action’ COM (2022) 236 final, 18 May 2022; Commission, ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions «Save gas for a safe winter»’ COM (2022) 360 final, 20 July 2022.

²² For more information about legal acts, see: Acer Europa ‘Network Codes’ www.acer.europa.eu/gas/network-codes accessed: 7 September 2021.

²³ See for example: Commission, ‘Communication from the Commission to the European Parliament and the Council: European Energy Security Strategy’ COM (2014) 330 final, 28 May 2014; Commission, ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A hydrogen strategy for a climate-neutral Europe’ COM (2020) 301 final, 8 July 2020

²⁴ See for example: Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration [2017] OJ L312/54; Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October

EU rules provide cooperation mechanisms that create a framework for sharing risks and costs within the EU. However, the EU energy market is still more regional than pan-European, a fact that influences the model approach to assess energy solidarity (and also *just* transition). There is also a divergence between the security of energy supply and the socially unacceptable price to achieve such security, which the model should consider. This creates variations among the preferences of energy consumers and each decision may affect different consumers in different ways, creating a divergence between short and long-term adverse effects. This divergence is inevitable, and no model solution can change it, at least until the full implementation of the EU single internal energy market. However, the model approach can take into account this perspective as well as deviations from the model, which can be remedied by shielding measures as part of an intergovernmental action. This is the case if negative consequences for some consumers cannot be avoided. At this level of development of the internal energy market, it is not possible to create a single benchmark; thus, it is necessary to weigh the rationales and expectations through dialogue. The stronger the integration of the market, the less necessary such measures may prove to be. However, this does not detract from the need to create a model benchmark for energy solidarity in this aspect.

The recent energy crisis triggered by Russia's armed aggression against Ukraine demonstrates that such a crisis influences all EU countries, although not uniformly – raising the prices for natural gas, electricity, and heat in each EU Member State and raising the insecurity level with respect to energy supplies. Weighing the rationale of supply security and diversification, on the one hand, and prices on the other, results in a practical focus on stability and security of supply. Mechanisms are also being introduced on the national level to mitigate prices, both through market mechanisms (platforms for consumption reduction) and through administrative action (caps on energy prices for consumers). This shows that although the position of the average consumer among the EU Member States may differ, the EU point of reference is similar, if not uniform. What differs are national remedies, but the difference is more the consequence of the regionalization of the EU energy market than divergences in consumer expectations. This confirms that the model solution, for the solidarity approach related to security, is possible, but still requires some national adjustments.

This shows that *just* transition in terms of security cannot be applied uniformly, because conditions, and thus societal expectations, may be different. Energy solidarity, however, dictates that these diverse circumstances must be taken into account, and that, drawing on their diversity, the models of *just* transition must be built in accordance with the principle of European solidarity.

2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) No 994/2010 [2017] OJ L280/1, fn 45.

2. Competitiveness

The provisions of Article 194(1) TFEU do not directly address the competition and competitiveness aspects. However, they are at the heart of the construction of the EU internal market, including those for electricity and natural gas. The close link between these two sectors, and the policies of each Member State, has meant that, over several decades, activities in these sectors have been open to less market risk. Member States have adopted a range of regulations aimed at protecting their markets and safeguarding revenues for the operators. Political risk, although relatively higher than in other sectors, was also at a predictable level. However, this market model has gradually changed because of the progressive liberalization of the electricity and natural gas markets in the EU, and the increased importance of environmental and climate protection in the day-to-day operation of these sectors. The increasing use of new and renewable energy technologies has changed the cost and risk-pricing model, necessitating a new approach to competitiveness, and the rational pricing of external operating costs of different technologies, including those based on coal and lignite, as well as natural gas. The operating model of both markets is also changing, in a direction that takes into account: carbon pricing with the aim to decarbonize energy supply; fair allocation of system costs to the technologies that cause them; and the development of short-term markets for the cost-efficient dispatch of resources. The operating model is also changing towards the development of adequate levels of capacity and flexibility of the system, in particular with respect to the transportation infrastructure and back-up electricity production as well as the development of a stable investment framework in all low-carbon technologies.

It is crucial for the consumer of electricity, heat, and natural gas that these commodities are supplied continuously and at an acceptable price. The adopted regulatory market model is to ensure that their functioning mechanisms guarantee both the long-term and short-term adequacy of resources, ensuring secure and stable supply at an acceptable price, from the perspective of both normal market conditions and crisis situations. Energy solidarity ensures that such mechanisms are built-in and function both regionally and at the EU level. Any analysis of whether the conditions of solidarity are met in this regard, should include an answer to the question: To what extent do the introduced solutions ensure access to electricity and natural gas at a price acceptable to EU consumers, both in the short and long term? The analysis of both time frames is important, as lowering prices for certain groups of consumers as part of the State's social policy may, in the long run, result in their actual practical increase. Also, the subsidization of some consumer groups by others, because of State policy, can have a long-term impact on prices.

Hence, the essence of the competitive rationale is consumer price. All other variables are *de facto* included in the price. There is no need to look at the market more broadly in this context. However, the price need not be uniform within the entire EU. As statistics show, electricity and gas prices vary significantly between the Member States, which is particularly noticeable now, during Russia's armed aggression against Ukraine. The purpose of the investigation under this premise is to determine to what extent the price will change because of the legal solutions introduced. This does not preclude different wholesale or retail prices between national (and regional) markets within the EU from continuing.

The key here is a price that is socially acceptable. A fair transition can influence prices. Societies may accept these changes to varying degrees. Acceptance depends on the actual cost that energy represents in consumer budgets, but also on their awareness and acceptance of the direction of change. This acceptance can vary. The essence of EU energy solidarity comes down to identifying and accepting differences in approach, while seeking solutions so that these differences do not derail the long-term direction of change towards a sustainable and low-carbon economy.

This is exemplified by the EU's efforts where the Commission supports Member States that put in place a national strategy for the progressive reduction of existing coal and other solid fossil fuel generation and mining capacity, in order to enable *just* transition in regions affected by structural change. The Commission assists Member States in addressing the social and economic impacts of the clean energy transition, working in close partnership with the stakeholders in coal and carbon-intensive regions (Article 4 of Regulation Eu 2019/944).

3. Sustainability

The sustainability rationale does not appear in the text of Article 194(1) TFEU, which uses a narrower concept – “with regard to the need to preserve and improve the environment”. Nevertheless, sustainable development as a direction of EU development is set out in Article 3 TEU,²⁵ and the direction of environmental policy development is set out in Article 11 TFEU²⁶.

²⁵ Due to Article 3 TUE: “(...) the Union shall uphold and promote its values and interests and contribute to the protection of its citizens. It shall contribute to peace, security, the sustainable development of the Earth”.

²⁶ Due to Article 11 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”.

Sustainability is also the aim of long-term EU energy policy indicated in its secondary legislation.²⁷

Sustainability is commonly referred to in three dimensions: environmental, economic and social.²⁸ They are all closely interlinked, forming a *de facto* single environment-society approach. The economic sustainability approach, which combines sustainability in economic terms with long-term consumer well-being, seems the most appropriate in the proposed model.²⁹ However, the concept of “consumer well-being” is defined in different ways, with the broadest sense including, in addition to aspects relating to consumption and the production of goods and services, environmental and climate change aspects, as well as social cohesion. This definition, however, raises problems in terms of its treatment of aspects that have a non-economic value, which are very often linked with the environment and climate change. Because their influence is only partial, problems with their assessment remain, resulting in some uncertain externalities.³⁰ Additionally, when markets do not function properly, for example due to lack of effective competition, or the market is incomplete due to externalities that are not included in the price, the well-being of consumers cannot reach its full potential. This has a particular impact on the adequate consideration of non-economic considerations, such as the impact on climate change.

As the EU energy solidarity principle relates not only to the security of supply, but to all aspects of EU energy policy, the question of properly considering climate change issues is of primary importance. The fact that Member States have a diversified energy mix, based on one hand on fossil fuels such as coal, and on the other on renewable energy sources, makes it more important to ensure energy solidarity from the perspective of sustainability. The question arises as to whether legal solutions allowing a greater use of fossil fuels in some Member

²⁷ “Our vision is of the Energy Union as a sustainable, low-carbon and climate-friendly economy that is designed to last”, see: preamble to the Commission, ‘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, 25 February 2015.

²⁸ Herman Daly, *Ecological Economics and Sustainable Development* (Edward Elgar Publishing 2007).

²⁹ For more on the economic interpretation of sustainability, see: Partha Dasgupta and Geoffrey Heal, ‘The optimal depletion of exhaustible resources’ (1974) 41 *Review of Economic Studies* 3; Joseph Stiglitz, ‘Growth with exhaustible natural resources: Efficient and optimal growth paths’ (1974) 41 *The Review of Economic Studies* 123.

³⁰ This problem is evident in the revision of the methodology for examining mergers and state aid, currently being examined by the European Commission, where the difficulty lies in how to quantify non-economic aspects such as higher levels of environmental or climate protection.

States (as part of the so-called “*just* transition”) is the right solution. A certain balancing of the costs of transition, for consumers in the most vulnerable Member States, seems justified within the scope of energy solidarity. However, the problem of how to define the limits remains. A kind of “trade-off” could meet the expectations of consumers in other EU Member States. There is thus a need to define the conditions of EU consumers from the point of view of energy solidarity first, and then to investigate the facts and find appropriate remedies or trade-offs. There are several sustainability metrics, both general and more generic, including the sustainability of energy use in the economic approach.³¹ These metrics allow for additional dimensioning of the magnitude of the impact and the resulting consequences. However, the practical application of energy solidarity requires that policy makers take an active role to mitigate these determinants, in line with *just* transition expectations from the societies.

VI. Summary and policy implications

A new world order attempts to prioritize security and climate change. The European Union wants to achieve strategic autonomy and economic security in order not to suffer negative consequences of its development. However, the EU society expects the transition to be *just*, that is, to take account of differing social circumstances and needs, but with the far-reaching goal of changing the socio-economic model towards a low-carbon and sustainable economy in the future.

Solidarity is a “perspective” tool helping to achieve these goals, providing the rationale for achieving *just* transition. Solidarity is a multi-dimensional concept, where social, political, and legal aspects intermingle. Solidarity refers to a unity based on a community of interests, objectives, and standards; it may result from generosity (altruistic or ethical imperatives) or self-interest (insurance). Solidarity is more of a “mindset”, but States are adopting this concept to build institutions around a model of justice. A *just* transition is an emanation of this principle.

The implementation of EU energy solidarity towards *just* transition, requires an approach combining different policy objectives and measures (security, competition, sustainability). In case of conflict between different objectives, there is a need for “trade-offs” to be made, in order to balance competing interests and rationales. Balancing the latter requires a view that takes into account the diverse circumstances of local communities. EU energy solidarity is, in a sense, a bracket that binds these diverse circumstances together, giving them long-term goals, and providing a rationale for determining how to achieve them.

³¹ L Suganthi, ‘Sustainability indices for energy utilization using a multi-criteria decision model’ (2020) 10 *Energy, Sustainability and Society* 1; and the publications listed therein.

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