Essays

Exploring the Possibility of Energy Justice in Italy

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Abstract

This research aims to look at energy justice taking an interdisciplinary approach for trying to address the problems and questions that arise from the Italian energy transition. While Italian energy policy and law have never been particularly constructive in terms of long-term policies, this historical moment presents an opportunity to rewrite its objectives and identify how the energy transition can be a just transition. Italy can pursue change in this regard through the energy justice metric which must be used in theory but also in practice to identify weaknesses and propose solutions within a legal system. Energy Justice must be the driving force behind a just transition for Italy and the entire society.

I. Introduction

In energy law studies researchers seldom ask themselves the basic question of what energy conceptually means for our society. Is it merely an essential resource for the economy, or does it have a deeper meaning and function? How do we conceptualize energy rather than physically describe it? Energy is a combination of risk and responsibility. Risk because, like all human benefits we enjoy, it involves a risk that must be reasonably assessed. In the same way, as we evaluate the lower risk method when travelling or receiving medical care, we must assess the lower risk method when approaching the energy activities. There is no such thing as progress without risk. Energy and its development hold several unavoidable implications. Responsibility, on the other hand, comes into play when it comes to the extraction and utilization of natural resources, as well as their distribution and spreading in the global economy. Responsible actions in the energy industry are required to control and reduce the environmental impact and the effects of climate change. In this contest, risk and responsibility find their expression in the innovative and deeply meaningful concept of energy justice as that kind of social justice that serves to shape the sector in a way more sustainable, fair, and equitable so that the advantages accrued do not have an irreversible impact on the environment and climate and they are equally spread and distributed.

Energy justice is not only a theoretical and interpretative concept but also

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has practical and applicative implications. Our society is full of injustices and inequalities, we just have to decide which sector to look at and which instrument to use to identify them. Energy justice now seems to have acquired such importance that it cannot be neglected by the public policies of any state that aims to combat climate change. The most important step in integrating energy justice with the public policy was taken by the United States of America in appointing Shalanda Baker, professor of public law, as deputy director for energy justice at the US Department of Energy, by the new Biden administration.[1] This not only symbolises the full recognition of energy justice as a new public policy to be pursued by all states but is an unequivocal admission that the energy sector is rife with inequalities and injustices and that these must be eliminated as soon as possible. And the fact that a professor of public law has been chosen is no accident. Law punishes, sanctions, constrains but also regulates legal relations in a society and identifies the objectives necessary for its preservation. As a result, today's energy law and policy scholars cannot avoid using the energy justice framework to examine individual aspects and elements of the energy world.

This research wants to clarify that energy justice is not the outcome of the energy transition, but it is a methodology, a metric through which it is possible to frame the energy transition decisions. This study uses the energy justice framework as a tool to explore Italy's energy transition, as well as the obstacles it faces and the potential solutions. As a result, the principles, aid not only in identifying and defining these problems but also in finding just and fair solutions. The energy sector, like our society, requires more justice, not just in terms of human rights, but also of responsibility and solidarity. We must protect our planet, making it safe for present and future generations without halting technological growth and innovation. The concept of sustainable development, which arose in the aftermath of the Rio Declaration, may have found a successor capable of having a significant impact on society and the energy industry. Energy justice must remain a topic of discussion among academic forums because it is only in this way that society can truly move towards a transition, a just transition.

I think it is important for scholars to realise that energy justice takes place in two ways: first, a new law is introduced to ensure justice happens; and second when we go to the national legal courts to advance justice on a certain issue. Researchers from all the disciplines need to realise what they are seeking and how new advancements might happen, ie which of the two ways mentioned above will be needed or maybe they both will.

In this worldwide scenario exploring energy justice in Italy is not a case. The recent health crisis caused by the COVID-19 virus has prompted European Institutions to provide large sums of money to the Member States for economic recovery. Most of the new funds will be used to implement green and sustainable

[1] Department of Energy Announces New Senior Leaders (energy.gov 2021), available at https://tinyurl.com/yfajbhwp (last visited 30 June 2022).

economy. The establishment of a new Ministry for the Ecological Transition in Italy demonstrates the importance of this commitment and the growing need to follow the sustainable energy pathway. So, this study may also benefit lawmakers, helping them in the implementation of energy justice within the Italian framework.

II. The Energy Justice Framework

1. General Background to Energy Justice

In recent years, energy has once again become a central issue in the public and academic debate. The combination of several factors, such as climate change, the gradual depletion of fossil resources, and the increasing precariousness of energy supplies mean that much of the global political agenda is focused on the transition to a low carbon economy.[2] European institutions as the real political and normative drivers of the Member States are moving substantially on two levels: environment and security. The first involves reducing emissions by replacing fossil fuels with renewable ones, saving energy and increasing energy efficiency; the second involves building new infrastructures to expand the number of supplier countries.[3] These twin goals embrace the need to ensure affordable and clean energy access for the world's population, as well as the need to address climate change by reducing the use of fossil fuels.[4] On the way to a transition to a low carbon economy, policymakers cannot overlook the injustices of the energy world if the aim is the consideration for social justice in terms of fairness in access to resources and technology allocation.[5] These injustices affect not only the society and the weaker classes but above all the environment and the ecosystem. So, a just society must be imagined not only as the result of the energy transition but also as a metric to shape all the decisions. The energy justice framework helps, therefore, to identify the weaknesses of an energy system and to transform these weaknesses into challenges. Only when these various obstacles are overcome, and injustices have eliminated the transition to a low-carbon economy can move forward.[6]

Before moving forward, a review of the energy justice framework is due.

The concept of energy justice has emerged in recent years in the social sciences studies as an analytical-interpretive, evaluative-normative tool applicable to socially relevant issues such as law and policy, the diffusion of technologies/production

[2] R.J. Heffron, *Energy Law: An Introduction* (Berlin: Springer, 2nd ed, 2021).

[3] X. Teng, L. Chun Lu and Y.H. Chiu, 'How the European Union reaches the target of CO2 emissions under the Paris Agreement' *European Planning Studies*, 1836-1857 (2020).

[4] Ibid, 1836-1857.

[5] D. McCauley, V. Ramasar, R.J. Heffron, B. Sovacool, D. Mebratu and D. Mundaca, 'Energy justice in the transition to low carbon energy systems: Exploring key themes in the social sciences' *Applied Energy*, 916-921, (2018).

[6] D. McCauley and R.J. Heffron, 'Just transition: Integrating climate, energy and environmental justice' 119 *Energy Policy*, 1-7 (2018).

systems, consumption and access to the energy market, activism, and participation in energy decisions.[7] It has been proposed to consider energy decisions as ethical and justice issues, and to reconsider how the energy system's dangers and externalities, as well as its benefits and advantages, are distributed within society, and whether decision-making reflects criteria of equity, inclusion, and representativeness.[8] Whatever the scope and objective of an energy justice framework are, it provides a useful tool for the researcher to analyse (and reflect on) where do injustices occur, who is impacted or neglected, and what mechanisms are in place to address them so that they are brought to light and reduced. The energy justice principles have been theorized with this purpose, of identifying all the aspects of the society where energy injustices occur, and which actions must be taken. The concepts that underpin the energy justice system fix distributive, procedural, and recognition concerns for energy goods. Furthermore, there are increasing questions about a restorative and cosmopolitan energy system in which the global influence of our behaviours and decisions is considered.[9]

2. Distributive Justice

Distributive justice refers to how the costs and benefits of change are spread not only between individuals and social classes (between groups and communities) but also geographically (between territories) and temporally (eg intergenerational justice). Reflecting on the entire energy system necessitates and forces one to consider how the costs and benefits of change are distributed over the energy cycle.

3. Procedural Justice

On the other hand, procedural justice applies to the demand for equal proceedings that include all involved parties in a non-discriminatory manner. Availability of information, accountability, integrity, inclusiveness and representativeness of the various interests at stake are all aspects of procedural

[7] K. Jenkins and R.J. Heffron, 'Energy justice: a conceptual review' 11 *Energy Research & Social Science*, 174-182, (2016).

[8] B.K. Sovacool and R.J. Heffron, 'Energy decisions reframed as justice and ethical concerns' 1 (5) *Nature Energy*, 16024 (2016).

[9] K. Jenkins, R.J. Heffron et al, 'Energy justice' n 7 above. Interesting is the role played by critical minerals in the international legal and political scenario. It is a fundamental objective to transition towards a low-carbon economy worldwide to achieve this ambition which inevitably pass through the need for new and more mineral extraction which is necessary for the technology for this low-carbon transition. These minerals are known as critical minerals. The importance of these minerals calls for a deeper examination of the extractive industries and the injustices are committed. Despite few works have been focused on this topic, the energy justice framework has pointed attention on these matters encouraging for example the Canadian government to appoint a Responsible for Enterprise that will assess and investigate the actions of Canadian overseas companies focusing on human rights abuses in mining, oil and gas and garments, see Office of the Canadian Ombudsperson for Responsible Enterprise (CORE), available at https://core-ombuds.canada.ca/core.

justice.[10] This necessitates not only that all potentially affected people be allowed to participate in the consultation that precedes decision-making and that their voices be heard, but also that effective processes of participation, access to knowledge and impartiality, and information-sharing by industries and governments be in place.

4. Recognition Justice

Recognition justice refers, instead, to the (non-)recognition or misrecognition of social groups and geographical areas, as 'the process of insult and degradation that devalues some people and some identities of place in comparison with others'.[11] Non-recognition can take several forms, including ignoring certain decisions that impact social groups and sectors of society, or misrecognition of individuals and groups, in which distortions of their views and desires are linked to multiple forms of non-recognition and devaluation. Non-recognition can also influence how procedures are followed (whether and how they are involved, treated and represented in decision-making) and how the impacts and costs of the energy system are distributed (how decisions reflect recognition of the concerns and opinions of different audiences by assessing and redistributing costs and benefits).[12]

5. Restorative Justice

Restorative justice is concerned about how it can be rectified if there is an injustice in the energy sector. This can be done in the form of the allocation of project revenues but also by returning the energy sites issues to their former use, especially in the extractive industries. Consequently, within the context of the project and the guidelines laid down in the law, the waste management and decommissioning strategy should be adequately finalized and cost-effective. In addition, restorative justice may aid in identifying where prevention needs to occur.[13]

6. Cosmopolitan Justice

Finally, the relation to cosmopolitan justice is based on the central belief that we are all people of the world. As the energy market evolves and energy demand rises, our decisions have a global impact that must be recognized and

[10] G. Walker, 'Beyond distribution and proximity: Exploring the multiple spatialities of environmental justice' 41 (4) *Antipode*, 614-636 (2009).

[11] D. McCauley, 'Advancing energy justice: the triumvirate of tenets' 32 (3) *International Energy Law Review* (2013).

[12] R.J. Heffron and D. McCauley, 'Achieving sustainable supply chains through energy justice' 123 *Applied Energy*, 435–437 (2014).

[13] R.J. Heffron, 'The role of justice in developing critical minerals' 7 *The Extractive Industries and Society*, 855-863 (2020).

accounted for. Recognition of our decision's cosmopolitan influence is beginning to spread and take place all over the world. There have been several recent strong examples of rising interest in legal action with cosmopolitan impact as a result of cross-border or overseas repercussions. In a 2019 Australian ruling, a judge argued that a coal mine should not be allowed to open because of the carbon dioxide emissions that would be caused elsewhere in the world.[14] This cosmopolitan approach to energy issues seems to be associated with the most recent theory of a cosmopolitan turn in public law systems and constitutional theory, which asserts that global issues and their consequences must be considered in legal practice and procedure to achieve a just society.[15]

III. Energy Poverty and the Just Transition: A Critical Review Through the Recognitive and Distributive Justice Metric

1. The International and European Scenario

The United Nations has established as the First Sustainable Development Goal the zero going of the worldwide poverty while as the Seventh Goal, the accessibility to reliable and sustainable electricity.

Reading and interpreting together these two goals, the United Nations is setting the goal and objective of fighting energy poverty. The United Nations has set a target of ensuring universal access to energy resources by 2030, with an emphasis on delivering modern and sustainable energy to all developing and least developed countries.[16] Governments and politicians are concerned about these goals because they presume and involve fighting one of the main and most difficult challenges of our century, energy poverty, where its abolition or reduction is seen as vital for social welfare.[17]

Energy poverty and the obstacles to access to energy services can have multiple faces nowadays and therefore, it is possible to produce effects even in developed countries. This is because energy poverty is linked not only with issues that are strictly related to the energy sector, such as energy security and energy prices but it is interconnected with social, employment and cultural problems of different nature and intensity throughout Europe. Therefore, the challenge of energy poverty calls for the implementation of social rights firstly

[14] *Gloucester Resources Limited* v *Minister for Planning* [2019] NSWLEC 7, available at https://www.caselaw.nsw.gov.au.

[15] M. Kumm, 'The Cosmopolitan Turn in Constitutionalism: On the Relationship Between Constitutionalism in and Beyond the State', in J. L. Dunoff and J. P. Trachtman eds, *In Ruling the World? Constitutionalism, International Law, and Global Governance* (Cambridge: Cambridge University Press, 2009), 69.

[16] The 2030 Agenda for Sustainable Development: The 17 goals, The United Nations, available at https://tinyurl.com/4y5jvkrr (last visited 30 June 2022).

[17] A.J. Bradbook and J.G. Gardam, 'Placing Access to Energy Services within a Human Rights Framework' 28 (2) *Human Rights Quarterly*, 389-415 (2016).

through a distributive and recognition justice initiative. Energy policies rather than being used to combat social inequality and make the change socially acceptable, have effectively excluded significant segments of the vulnerable population and marginalized areas from economic and quality-of-life benefits[18]. This is the result of ineffective policies that resulted mainly in short-term welfare measures which do not solve the problem but just postpone it. But today energy transition policies require initiatives as part of a long-term strategy aiming at solving the problems once for all.[19]

The European policies have identified the problem of energy poverty and the inequalities and disparities it brings, trying to set a common strategy and common guidelines. The European Green New Deal represents a new growth strategy aimed at transforming the European Union into a fair and prosperous society with a modern, resource-efficient and competitive economy that will not generate net greenhouse gas emissions by 2050 and where economic growth is decoupled from resource use. Among the various macro-objectives set out in the strategy, one is the duty of public policies to combat energy poverty as well as to secure the supply of clean, affordable and secure energy, consistent with the process of reducing emissions, with priority given to energy efficiency, ensuring affordable prices for consumers and businesses, in an interconnected and digitised European market.[20]

In the contest of the European Green New Deal, the European Union institutions have adopted a whole range of several initiatives to specifically address the problem, one for all the Next Generation EU, a fund which makes it possible for states to benefit from a temporary funding mechanism that allows for a large and timely increase in spending without increasing national debts.[21]

[18] C. Liddel and C. Morris, 'Fuel poverty and human health: A review of recent evidence' 38 *Energy Policy*, 2987–2997 (2020).

[19] F. Biddau, 'Questioni etiche e resistenze nella transizione energetica: quali sfide per le scienze sociali?', in F. Bertoni, F. Biddau and L. Sterchele eds, *Territori e resistenze. Spazi in divenire, forme del conflitto e politiche del quotidiano* (Roma: Manifestolibri, 2019).

[20] One for all it must be mentioned the European Climate Law which, in the broader contest of the European Green New Deal, formalizes the goal of making Europe's economy and society climate-neutral by 2050. The law also establishes an intermediate goal of cutting net greenhouse gas emissions by at least fifty-five percent by 2030 compared to 1990 levels. Climate neutrality by 2050 entails reaching net zero greenhouse gas emissions for all EU countries, primarily through emission reductions, green technology investment, and environmental protection. The law strives to ensure that all EU policies contribute to this goal, as well as participation from all sectors of the economy and society, see Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality, available at https://eur-lex.europa.eu/. For further readings see G. Claeys, S. Tagliapietra, G. Zachmann, 'How to make the European Green Deal work' 13 *Bruegel-Policy Contribution*, (2019). See also R. Miccù, *Lineamenti di diritto europeo dell'energia. Nuovi paradigmi di regolazione e governo multilivello* (Torino: Giappichelli, 2019), 192; G. De Maio ed, *Introduzione allo studio del diritto dell'energia. Questioni e prospettive* (Napoli: Editoriale Scientifica, 2019).

[21] To this end, the Commission proposes to issue bonds on behalf of the Union with different maturities on the capital markets and identifies several own financing measures consistent with EU

The measures indicated in the Next Generation EU Fund aim at fighting poverty in all its manifestations with ad hoc measures such as REACT-EU3 (forty-seven point five billion euros) to strengthen cohesion policy with actions in favour of the labour market, income support, strengthening of health systems and measures for small and medium enterprises;[22] an instrument for Recovery and Resilience to finance investments and reforms to promote economic, social and territorial cohesion (Art 175 Treaty on the Functioning of the European Union) and support green and digital transition. Greater attention must be paid to the Fund for a Just Transition.[23]

The main mechanism underpinning the European Green New Deal and the Next Generation EU is represented by the Just Transition Fund (JTF), which is designed to help the Member States achieve their 2050 targets. However, given that the JTF was also established to encourage certain countries to commit to the ambitious climate goals of the EU and, in particular, to achieve climate neutrality by 2050. The conditions for the allocation of JTF funds must be proportionate and adequately distributed accordingly to the greatest need for action, mainly because of the negative economic effects arising from the termination of high-impact operations. The Fund offers priority to coal- and carbon-intensive areas, where the urgent phase-out of coal by 2030 remains a priority and a challenge.[24] This is because, in a significant number of mostly Central and Eastern European countries, achieving deep decarbonisation in line with the Paris Agreement's objective of limiting global warming to two degrees Celsius and reducing energy poverty require a change in every sector of the EU economy and so it represents a far more difficult issue. The fund will prioritise regions with huge conventional energy sources impact. But its scope should be wide enough to start addressing

policies to combat climate change, such as emissions trading and the carbon border adjustment mechanism, and on global tax fairness, such as taxing the digital economy. Five hundred billion euros of the funds channelled through Next Generation EU will be used to finance the grant component of the Recovery and Resilience Facility and to reinforce other crucial crisis and recovery programmes. The remainder of the funds mobilised, ie two hundred fifty billion euros, will be made available to Member States in the form of loans under the Recovery and Resilience Plans after having developed tailor-made national recovery plans based on the investment and reform priorities identified in the framework of the European Semester, in line with national energy and climate plans, plans for a just transition, partnership agreements and operational programmes under EU funds, see European Commission, Directorate-General for Budget, The EU's 2021-2027 long-term budget & NextGenerationEU: facts and figures, Publications Office, 2021, https://tinyurl.com/5xx76268 (last visited 30 June 2022).

[22] ibid

[23] Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy, available at https://tinyurl.com/mpjz9u6s (last visited 30 June 2022).

[24] S. Tagliapietra, 'The European climate law needs a strong just transition fund' 10 *Bruegel-Blogs* (2020), available at https://tinyurl.com/usef8t4c (last visited 30 June 2022).

the transition needs of the rest of the economy as well. In addition, the JTF also provides for several other ranges of interventions, including the retraining of the employees in these sectors and their redeployment with a view to the transition to a zero-climate impact, the promotion, the reclamation and reuse of sites towards a circular economy, energy efficiency and renewable sources. Countries will have to submit 'territorial just-transition plans' to show that the funds are needed and where and how they will be spent. Countries will also have to demonstrate how they plan to fulfil their national climate objectives, as the proposal also mentions the need to be 'consistent with their National Energy and Climate Plans and the EU objective of climate neutrality by 2050'.[25] Furthermore, the JTF has also been designed and set up to mitigate the costs of social transition. The fund's stated objective is to

> 'alleviate the impact of the transition by financing the diversification and modernisation of the local economy and by mitigating the negative repercussions on employment'.[26]

The Just Transition Fund offers the opportunity for national policies to look at the energy injustices and at the regions and communities which need attention for deeper intervention. The JTF helps not only to recognize which entities need help but also to adequately distribute the funds accordingly to the different needs and expectations for the energy transition.

2. The Italian Energy Contest and the Ineffective Actions in the Energy Market

Despite the largest beneficiaries of the Just Transition Fund are Germany, Poland and Romania (although the highest aid intensity as a share of the population is in Estonia, Bulgaria and the Czech Republic) with still an energy economy strongly coal-based, Italy will set its own goals to address the inequalities and injustices of the energy industry trying to invest the fund coming mainly from the Next Generation EU and the Recovery Plan after the Covid-pandemic.

In this contest, Italy has tried to crystalize its energy transition policies as 'ecological modernisation', which emphasizes technical innovation as a way out of the crisis using market power as a tool to accelerate change.[27] The combination of technological innovation and market inclusiveness has resulted in policies that, for example, have encouraged the production of energy from renewable sources and the adoption of energy-efficient devices thanks to government

[25] Regulation (EU) 2021/1060 n 23 above.

[26] G. Claeys and A. Sapir, 'The European Globalisation Adjustment Fund: Easing the pain from trade?' 5 *Bruegel- Policy Contribution* (2018), available at https://tinyurl.com/2p9b5867 (last visited 30 June 2022).

[27] A. Machin, 'Changing the story? The discourse of ecological modernisation in the European Union' 28 (2) *Environmental Politics*, 208-227 (2019).

incentives and tax credit. Citizens and companies have had varying degrees of access to these policies as a result of how they were crafted. The decision was made to speed up the energy transition by stimulating the upper-middle class to opt for innovation: homeowners, households with stable incomes, savings and the spending power to make major investments, such as installing photovoltaic panels and structural energy-saving measures in their homes, buying a new car with ecological features, and buying homes in high energy classes.[28] For various reasons, these policies have been difficult for the lower and middle classes to access. Unemployed, precarious workers, families with low incomes and no savings: these are types of situations that for different reasons have problems accessing policies based on direct incentives or in the form of tax deductions.[29] The energy transition policies must be anchored to improve the quality of life of people who do not currently benefit from ecological modernisation.[30]

The Italian institutions have developed partial and insufficient responses, primarily based on three approaches: intervention on energy prices to reduce the cost of energy to the final consumer; activation of policies to ensure access to energy services for the most vulnerable sections of the population; and income support for the most vulnerable, through the introduction of energy bonuses.[31] On the first front, competitive energy markets were established through liberalization, which should have resulted in lower average energy costs. However, many companies' entry into the free market has not resulted in lower energy prices, and vulnerable consumers are becoming more susceptible to switching operators. In Italy, the free market is still very limited. Major monopolistic companies continue to prevent competitors from entering the market, inhibiting the formation of a competitive game aimed at drastically lower prices.

On the second and third front, the Italian Electricity and Gas Market Regulator (ARERA) has long tried to intervene with specific measures (payment instalments, maximum interest rates, prohibition of service suspension in cases of extreme hardship) to protect the most vulnerable consumers.[32] The energy and gas incentive, for example, is designed to help customers who are struggling financially (as measured by a set of indicators) or affected by serious health conditions, or already have access to anti-poverty measures such as citizenship income and the shopping card. The Electricity and Gas Market Authority has tried to confirm and strengthen the social bonus for families in difficulty, especially in

[28] G.E. Halkos and E.C. Gkampoura, 'Evaluating the effect of economic crisis on energy poverty in Europe' 144 *Renewable and Sustainable Energy Reviews* (2021).

[29] G. Carrosio, 'Povertà energetica: le politiche ambientali alla prova della giustizia sociale' 2 *Urbanit.it* (2020).

[30] S. Supino and B. Voltaggio, *La povertà energetica. Strumenti per affrontare un problema sociale* (Bologna: il Mulino, 2020), 365.

[31] M. Jessoula and M. Mandelli, *La povertà energetica in Italia: una sfida eco-sociale* (Bologna: il Mulino, 2019).

[32] ARERA, 'Rafforzamento dei meccanismi di sostegno per i consumatori vulnerabili', available at https://tinyurl.com/45ba42jh (last visited 30 June 2022).

this period where the Covid-pandemic has strongly affected the citizens' incomes and where the energy prices are rising fast. Based on the provisions of the Legge di Bilancio no 234 of 2021, the Government has allocated further resources for these interventions, thus allowing to lighten the impact of the rising of energy prices on twenty-nine million families and six million micro-businesses.[33]

These different approaches represent thus a downstream response that increases household purchasing power, but it is incapable of influencing consumption quality, improving energy efficiency rate, or possibly solving the energy poverty problem proportionally to the long-term strategy that requires the energy transition.[34] Moreover, according to studies by the Bank of Italy, only about one-third of those eligible benefit from this aid.[35] And in the latest report on the energy bonus made by the Electricity and Gas Market Regulator to the Minister of Economic Development in 2019, it emerged that the number of households that have obtained the bonus at least once, from the start of the mechanism to 31 December 2018, is two point nine million for electricity and about one point eight million for gas.[36] Despite the Energy Regulator's various initiatives to raise awareness of the tool among potential recipients, with information campaigns and projects aimed at involving other actors working with vulnerable citizens, the relationship between households that qualify for the electricity and gas bonus and those that receive the bonus has consistently been between thirty percent and thirty-five percent.[37] These percentages vary at the territorial level: in the southern regions, the average number of beneficiaries using this tool drops to twenty-one percent, while in the northern regions it rises to forty-three percent.[38]

Although the European framework has been clear on the objectives to pursue a just energy transition by providing huge sums of money as specified by the Green New Deal, the Next Generation EU, and the Just Transition Fund,

[33] Despite the interventions, however, the increase for the typical family in protection will still be plus fifty-five percent for the electricity bill and plus forty-one point eight percent for the gas bill for the first quarter of 2022. For two point five million families who are entitled, on the basis of ISEE, to the social bonus for electricity and for one point four million who benefit from the gas bonus, the tariff increases have been substantially offset: the amounts defined for the next quarter, thanks to the resources made available by the Budget Law, allow families in difficult conditions to protect themselves from the increase. The Authority, in fact, has increased the bonuses that, for the first quarter of 2022 alone, will support families in difficulty with around six hundred euros, see legge 30 December 2021 no 234.

[34] M. Jessoula and M. Mandelli, *La povertà energetica in Italia* n 31 above.

[35] I. Faiella, L. Lavecchia and M. Borgarello, 'Questioni di Economia e Finanza. Una nuova misura della povertà energetica delle famiglie' *Banca D'Italia*, 404 (2017), available at https://tinyurl.com/2p932792 (last visited 30 June 2022).

[36] Autorità di Regolazione Energia Reti Ambiente, 'Il bonus sociale elettrico e gas: stato di attuazione nell'anno 2019 Relazione al Ministro dello Sviluppo Economico', ARERA (2020), available at https://tinyurl.com/24zhukyc (last visited 30 June 2022).

[37] ibid

[38] ibid

Italy has mostly delivered welfare remedies that are useful in the short term but do not provide a solution or a vision for a long-term plan. The energy transition is a strategy that should be implemented over the medium to long term, rather than in the short term.

3. The Energy Trilemma. Which Development in the near Future?

As previously stated, existing downstream market devices, while providing welfare subsidies to offset the immediate impact and repercussions of the crisis on energy consumers, do not provide a suitable response to the subject of energy poverty and its future. On the downstream market, further initiatives may be looking at working to reduce energy demand and increase energy efficiency while enacting policies for renewable investments (such as solar panels for households) or tax credits and supports that can reach the lower classes rather than just those who have a certain turnover or income level. But to accomplish this, it must be created an integrated upstream policy and a legal framework that will easily help the downstream market initiatives handling inequalities and injustices with direct impact on social matters (fighting energy poverty), environmental (reducing greenhouse gas emissions), energy (increasing energy efficiency), and economic issues (boosting the industry renovation sector and creating new green jobs).

To my knowledge, the only effective way to combat energy poverty and deliver an important result towards the energy transition is to focus on energy security public policies. Energy security and the question of energy resources independence represents the legal and political dilemma of the century with implications on the political and economic national scenario. A country that cannot control its energy resources cannot control its future. Independence means that a country that manages its resources can keep under control the energy prices, the energy demand and balance both to create an efficient and trustworthy supply for companies and individual consumers.[39] All efforts to decrease energy poverty may find a temporary solution through welfare measures, but for a long-term solution, governmental policies that make Italy substantially energy independent must be accompanied and supported. Therefore, it becomes clear which constitutes the three key areas of the energy industry: energy poverty, energy security, and energy transition. These three elements share a genetic connection, and they make up the energy trilemma, in which energy poverty is a problem, energy security is a solution, and the transition is the desired outcome.[40]

How can this be done if Italy has always been strongly dependent on fossil

[39] B. Shaffer, *Energy Politics* (Philadelphia: University of Pennsylvania, 2009), 200.

[40] For a first theorisation of the energy trilemma in the academic literature see R.J. Heffron, *Energy Law* n 2 above. For the Italian edition just see R.J. Heffron (Italian edition by L.M. Pepe), *L'Energia attraverso il diritto* (Napoli: Editoriale Scientifica, 2021), 224. The use that needs to be made of the energy trilemma: it must be useful in identifying national challenges even in different legal systems, enabling public policies to balance the different needs and interests at stake.

fuels?[41]

The COVID 19 pandemic that has hit the world in 2020 has shown how Italy managed to reduce the share of hydrocarbons in its energy mix (around sixty percent). The new sharp drop in 2020, which brings the share of fossil fuels to its lowest level since 1961, is mainly attributable primarily to the drop in oil in transport, a consequence of the collapse of mobility, as well as the reduction in production activities. But, on the other hand, the collapse in oil consumption in 2020 has strengthened the position of gas, which has now reached thirty-seven point four percent, some seven percentage points more than the weight of oil.[42] Gas has been widely recognized as the least harmful fossil fuel and also as the resource that could accompany the transition. The problem is that the gas supply is mainly coming from foreign suppliers such as Russia or the US which export to Europe Liquefied Natural Gas (LNG).

Reducing reliance on Russian gas in the future does not appear to be simple, since it is unknown how long other suppliers, such as Algeria, would be able to maintain output or how reliable Libya will be. The collapse of European domestic production, along with the possibility that even Norway will have difficulty replacing its reserves, has contributed to the development of a rigid infrastructure that, if it goes unchanged, will result in an increase in the share of Russian gas imported.[43] This is today's picture, while other scenarios appear to be imaginative in comparison. So, assumption one is that gas demand will continue for a few years, and assumption two is that where we obtain it will be determined by the current infrastructure. And, because Italy decided to stop exploring and exploiting gas in the Adriatic Sea (apparently, the perforations could cause Venice to sink), we are compelled to look for other and diverse resources as part of a long-term strategy.

Renewable energy sources, on the other hand, may and must accompany the Italian energy shift. However, even though solar, wind, and biomass account for more than thirty percent of the energy mix, this rate does not appear to be a sufficiently favourable trend in the race to meet energy security requirements. In this regard, on 13 August 2021, the European Commission, following the

[41] A. Di Gregorio, 'Produzione e valore del comparto oil & gas in Italia nel periodo 2020-2050' *Esperienze d'impresa*, 1-18 (2019).

[42] ibid

[43] S. Tagliapietra, *L'energia del mondo. Geopolitica, sostenibilità, green new deal* (Bologna: il Mulino, 2020), 158. This geopolitical scenario was already clear several years ago with Europe trapped in the grip of Russian or North African gas. But with the steady closure of coal-fired power stations and the increase in energy demand, the energy mix has increasingly shifted to gas as investment in renewables has failed to keep pace with rising demand. The awareness of a dependence on gas by European states has inevitably led to an increase in its price, which has a knock-on effect on consumers' electricity bills, see also M. Verda, *Una politica a tutto gas, Sicurezza energetica europea e relazioni internazionali* (Milano: Università Bocconi, 2011); S.R. Schubert, J. Pollak and M. Kreutler, *Energy policy in the European Union* (London-New York: Palgrabe Macmillan, 2016); L.C.U. Talseth, *The politics of power: EU-Russia Energy Relations in the 21st Century* (London-New York: Palgrave Macmillan, 2017).

positive assessment of the National Recovery and Resilience Plan ('Piano Nazionale di Ripresa e Resilienza' – PNRR), granted Italy, as pre-financing, twenty-four point nine billion euros (of which eight thousand nine hundred fifty-seven billion euros in grants and fifteen thousand nine hundred thirty-seven billion euros in loans). A corollary of the PNRR has been the Decreto Semplificazioni *bis* (now Legge no 108 of 2021) which contains some significant improvements aimed at achieving the European goals of decarbonisation and increasing energy production from renewable technologies as set out in the 2030 National Integrated Energy and Climate Plan ('Piano Nazionale Integrato per l'Energia e il Clima 2030' – PNIEC).[44] A new Annex I-*bis* has been added to Part Two of Decreto Legislativo no 152 of 2006 (the 'Environmental Code') to identify the actions mentioned in the PNIEC, listing the works, plants, and infrastructures required to meet the PNIEC's targets (eg plants for the production of energy from renewable sources, energy efficiency projects, infrastructures for hydrogen production, transport and storage). The Decree also made several adjustments to the regulatory and normative components of the above-mentioned actions to accelerate and simplify their implementation. Arts 30 to 32 simplify authorization procedures for the installation of wind power plants, solar, geothermal, and biogas plants.[45] However, despite this broad set of normative and policy initiatives aimed at increasing renewable energy generation, it is believed that energy security, and thus the negative consequences on energy poverty, cannot be addressed and solved solely by relying on foreign gas supplies or renewable energy investments; not only will they fail to meet Italian energy demand in the short term, but they will also increase the country's reliance on foreign resources.[46]

New energy technologies must be explored and the success of the energy transition pass from the courage and audacity to admit and tackle the risks as well as the benefits that the energy industry provides to our society. Nuclear energy, for example, cannot be avoided anymore, and nuclear investments must be taken again into consideration for the Italian energy policies.[47] Since Italy is still

[44] Piano Nazionale Integrato per l'Energia e il Clima 2020, available at https://tinyurl.com/yc6d5h8s (last visited 30 June 2022).

[45] First and foremost, the Ministry of Culture must participate in the single procedure - and thus in the Conference of Services ('Conferenza di Servizi') convened by the Region or the Ministry of Economic Development to decide on the authorization requests - in relation to projects involving renewable energy plants and the works and infrastructures related to their construction and operation that are located in precluded areas. Furthermore, Art 32 of the Decreto Semplificazioni bis alters Art 5 of the Decreto Legislativo no 28 of 2011, identifying non-substantial interventions, and thus subject only to the procedure of the communication relating to the free building activity.

[46] L.M. Pepe and Aldo Arcangioli, 'The Scenario of Renewable Energy Sources in Italy and the Effects of COVID-19' 1 (2) *Global Energy Law and Policy*, 1-5 (2020).

[47] The story between Italy and nuclear power can be traced back to the period after the Second World War when Italy started the first nuclear program to provide electricity for a civil use. This project was visionary, and it managed to allocate in a short time period Italy as one of the leading countries in nuclear technology and electricity generation independence. But in the 1987, the

bounded to the obligation to create a national deposit for the nuclear waste produced in the past years according to the Euratom Treaty provisions, it would be wise to take the advantages and not only the disadvantages of such a resource/waste on our territory. The nuclear energy dilemma must be opened for discussion because it is only by keeping all the normative and political choices available that a just transition is possible. Furthermore, the European Institutions after adopting the 'Taxonomy Regulation'[48] providing that certain economic activities comply with climate change mitigation or climate change adaptation, in its delegated acts have specifically framed gas and nuclear power projects as green investments, so able to comply with technical screening criteria under which certain economic activities are qualified as contributing substantially to climate change mitigation and transition to a low carbon economy without causing significant harm to any of the other relevant environmental objectives.[49]

Solving the upstream dilemma of energy dependence on foreign supply must be at the centre of all the main public policies aimed at delivering a just energy transition.

It can be seen that the energy trilemma of energy poverty, energy security and energy transition can be balanced only through the energy justice metric and in this case recognition and distributive justice initiatives to make citizens'

referendum on nuclear power declared the irreversible Italian nuclear phase-out. Instead of focusing Italian energy policies on new sources or investing in new technologies, the result has been a steady increase in reliance on fossil fuels. In practice, the referendum merely replaced nuclear power plants with oil-fired thermal power plants, greatly increasing our dependency on crude oil imports and making the country extremely vulnerable to market fluctuations and the rise in the cost of crude oil, see L.M. Pepe, 'The Implementation of environmental and safety standards for the nuclear and mining waste management in Italy. Which role for the Public regulators?' *Amministrazione e Contabilità dello Stato e degli Enti Pubblici*, 1 (2020). For further and deeper analysis see L. Colella, *Il diritto dell'energia nucleare in Italia e in Francia. Profili comparati della governance dei rifiuti radioattivi tra ambiente, democrazia e partecipazione* (Roma: Aracne, 2017), 420.

[48] The EU taxonomy is designed to direct private investment toward the activities that are required to achieve the climate change mitigation goal. The taxonomy's classification does not dictate whether a certain technology will be included in a Member State's energy mix, but it does attempt to provide all conceivable solutions to help us expedite the transition and meet our climate goals. The Commission believes that private investment in gas and nuclear power can help with the transition, based on scientific advice and existing technology. The activities chosen in these two sectors are consistent with the EU's climate and environmental goals, allowing us to move quicker away from more polluting activities like coal production and toward renewable energy sources, which will be the key foundation for a climate-neutral future. See Regulation EU 2020/852 of the European Parliament and of the Council, available at https://tinyurl.com/528tndyd (last visited 30 June 2022).

[49] The technical screening criteria were included within the Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council (Taxonomy Regulation). Now The European Commission wil publish another Commission Delegated Regulation (EU) in order to amend the original Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors with the aim of including natural gas and nuclear power among the sustainable economic activities to pursue for the energy transition. This Delegated Regulation has been approved by the European Commission and it is waiting to be published in the European Official Journal see EU taxonomy Complementary Climate Delegated Act 2020.

rights bearers, energy rights bearers which must be defended and claimed in front of inefficient public policies. Those cannot disregard energy poverty as one of the main challenges of the energy transition and the need to tackle it not only with downstream actions which just solve the problem temporally, but it occurs long-term political decisions regarding the upstream market: renewables investments, reduction of foreign gas supply and the exploration of new technologies such as the nuclear power plants of new generation or hydrogen as well. That is only a long-term strategy that will be able to combat energy scarcity, provide sustainable energy supply and guarantee that disparities and inequalities will be tackled protecting the energy rights of the citizens.

IV. The Italian Legal System Through the Procedural Justice Metric

1. The Procedural Justice Questions

The implementation of an energy justice framework cannot avoid examining several aspects of procedural justice and how it would be possible to implement them within a legal contest. But what is exactly procedural justice, and how do we study it? Broadly, scholars speak about procedural equity as the ability for actors to have meaningful participation in decision-making processes that will affect them.[50] Other scholars describe procedural justice in the context of climate change and the capabilities of having the political power to shape decisions in the policy process.[51] In the energy justice, literature procedural justice has been described as concerning 'access to decision-making processes' which 'manifests as a call for equitable procedures that engage all stakeholders in a non-discriminatory way'.[52] A second approach to flushing out procedural justice in energy research is undertaken by those authors who believe the understanding of procedural justice aligns procedural justice theories with fairness and proportionality in the decision-making process.[53] In addition, they focus on transparency as well as the adequacy of legal protections, the legitimacy and inclusivity of institutions involved in decision-making. So procedural justice in the energy industry raises critical questions including Who gets to decide and set rules and laws, and which parties and interests are recognized in decision-making? By what process do they make such decisions? How impartial or fair are the institutions, instruments, and decisions involved?

These inquiries necessitate a thorough evaluation of several topics in the context of a legal situation. Procedural justice, particularly in the Italian legal

[50] D. Schlosberg, *Defining Environmental Justice: Theories, Movement and Nature* (Oxford: Oxford University Press, 2007).

[51] B. Holland, 'Procedural justice in local climate adaptation: political capabilities and transformational change' 3 (26) *Environmental Politics*, 391-412 (2017).

[52] K. Jenkins, R.J. Heffron, 'Energy justice: a conceptual review' n 7 above.

[53] B.K. Sovacool, R.J. Heffron, D. McCauley and A. Goldthau, 'Energy decisions' n 8 above.

framework, is thought to be primarily concerned with three aspects: access to environmental and energy information, participation in the decision-making process at both the authorisation and judicial levels, and procedural fairness in terms of decisions that the judicial body makes.

These three aspects of procedural justice can explain the importance of the implementation of these social justice instruments for the energy sector and the energy transition.

2. Access to Justice: Environmental and Energy Information and the Class Action: A Critical Overview

The Italian system appears to be very advanced in terms of providing various forms of information access: the traditional access by those who have a direct, concrete, and current interest;[54] the defensive access to protect a legally relevant position in judicial proceedings;[55] and then the Italian legal framework provides for an *ad hoc* form of access to information, tailored to the environmental and energy sector.

The birth of a systematic discipline on the subject of the right to access to energy and environmental information is usually attributable to the principles contained in the Aarhus Convention of 1998 on access to information, public participation in decision-making processes and access to justice in environmental and energy matters. The Convention has been ratified by Italy with Legge no 108 of 2001 but it is only with the Decreto Legislativo no 195 of 2005 that we will have a complete discipline based on the European Directives concerning the right of information and access to justice. Environmental information has a high value in the Italian legal system, both because its purpose is to disseminate data about environmental conditions and the current state of the resources that comprise the environment, and because it is granted to all who request it in the form of a subjective right to access the acts of public authorities that concern environmental procedures, without the need to declare any particular interest.[56]

The other, more problematic aspect of procedural participation is access to

[54] Art 22 Legge 241/1990, Code of Administrative Procedure.

[55] Art 24, para 7, Code of Administrative Procedure.

[56] Art 3 decreto legislativo 19 August 2005 no 195. A very broad notion of environmental information is outlined in the legislative decree that includes: the state of elements such as air and atmosphere; factors that may affect elements of the environment; reports on the implementation of environmental legislation; and cost-benefit analyses. Despite this broad notion and the ratio that characterizes the institute, there is no lack of limitations that have been mainly highlighted in judicial interpretation. In fact, the environmental information that can be accessed is only that which concerns factors or elements that could directly affect the environment and not any documentation that indirectly reflects this. In addition, even though the applicant is not required to have ownership and proof of interest, the latter may not submit requests that are characterized by obvious generality and in them must refer specifically to environmental matrices or factors referred to in art 2 of the decree, *ex multis* Consiglio di Stato 5 October 2015 no 4636 e Consiglio di Stato 17 July 2018 no 4339, www.giustiziamministrativa.it

justice, which is represented by interventions and compensation actions by the several stakeholders operating in the sector but, more specifically by all bearers of diffuse legitimate interests.[57]

Indeed, there is growing interest in broadening the legal standing of environmental associations defending the interests of nature and the ecosystem. This legitimacy could be defined as the possession of a qualified subjective legal situation protected by the legal system, or the plaintiff's special qualified position concerning the exercise of administrative power that distinguishes him from ordinary citizens. It follows, therefore, that the legitimacy conferred for the environmental protection in the case of associations of national and regional relevance, as provided by Art 18 of Legge no 348 of 1986, is wholly exceptional. Art 18(5) states:

> 'The associations identified on the basis of Article 13 of this law may intervene in legal proceedings for environmental damage and appeal to the administrative courts for the annulment of unlawful acts'.[58]

In addition to being able to intervene in administrative and judicial proceedings for the annulment of an illegitimate measure, they can bring class actions to obtain compensation for environmental damage through art 313 para 7 of the Environmental Code.[59]

[57] *Ex multis* see R. Ferrara, 'La protezione dell'ambiente e il procedimento amministrativo nella 'società del rischio', in D. de Carolis, E. Ferrari, A. Police eds, *Ambiente, attività amministrativa e codificazione* (Milano: Giuffrè, 2006), 344. Further more see the Adunanza Plenaria Consiglio di Stato, in its judgement of 25 February 2014, no 9, stated in point 8.1 that '*the issue of the legitimacy to appeal is declined in the sense that such legitimacy must be related to a situation and therefore deserving of protection, in a certain way*', available at giustiziaamministrativa.it.

[58] Then Art 13 tells us: 'The environmental protection associations of national character and those present in at least five regions are identified by decree of the Minister of the Environment on the basis of the programmatic aims and the internal democratic order provided for by the statute, as well as the continuity of the action and its external relevance, subject to the opinion of the National Council for the Environment to be expressed within ninety days of the request. After this period has elapsed without the opinion being expressed, the Minister for the Environment decides'.

[59] In fact alongside the exclusive power of the Ministry of the Environment (now Ecological Transition) to act judicially for compensation in case of environmental damages in specific proceedings also through the exercise of a civil action in criminal proceedings, art 313, para 7 entails the right of the person damaged by the fact producing environmental damage, in their health or in the property of their own property, to take legal action against the responsible party to protect the rights and interests harmed. This 'special' legislation on environmental damage goes hand in hand with the exclusive right to compensation for the public environmental damage of the Ministry of the Environment and as a matter of fact this special provision allows environmental associations to stand judicially '*iure proprio*', in trials for crimes that have caused damage to the environment, not as a public interest but, as any individual person, they can ask compensation for damage suffered directly and specifically, further and different from the general public damage to the environment as a public good and as fundamental right of constitutional importance. With respect to this special legislation, environmental associations can take part as civil plaintiffs in criminal proceedings with the right to compensation for the damage caused to the activity they actually carry out for the protection and enhancement of the territory, see Corte di Cassazione 19 January 2012 no 19439, available at

Despite this provision and the judicial attempts to expand its scope, it appears to be a marginal and residual instrument limited to a small number of cases in which environmental groups are successful in recovering damages for concrete and genuine prejudice. Perhaps it would be appropriate for our legal system to explore and trace a new path for this type of suitable protection for environmental ONG who want to see their efforts productive and protected. Perhaps one could follow the path traced by the Adunanza Plenaria in 2020 in which the Court, starting from the legitimacy of consumer associations to pursue legal action before the administrative judge, confirms the existence of a legitimating position of consumer associations as a position of a general nature;[60] this legitimating position does not depend only on an express legal provision, for example by the provisions of the Consumer Code, but it can also be extended beyond that, with regard, for example, to those associations that meet the requirements of legitimacy identified by administrative case law in environmental matters.

The Tribunal tells us that the legitimacy of consumer associations and civil actions for their protection can also be used by associations that protect differently, but still general, interests. The explicit recognition by the legislation of certain civil actions, such as those indicated in art 140 *bis* of the Consumer code are no longer exclusively reserved for consumers alone, but available to all those who complain of a violation of homogeneous individual rights, and so revealing the existence of a process of expansion towards the collective dimension.[61] More and more space is being structured around the concept of collective interest, which may be thought of as a simple summation of serial individual interests organized in a conscious and solidaristic super-individual dimension.

So given that the associations have the legitimacy to stand as well as in administrative law proceeding also as a civil party in criminal trials in case of environmental crimes[62], a further problem that has plagued the jurisprudence,

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[60] Adunanza Plenaria Consiglio di Stato 20 February 2020 no 6, available at www.giustiziamministrativa.it

[61] See S. Mirate, 'La legittimazione a ricorrere delle associazioni di consumatori tra "generalità" e "specialità" ' *Giornale di diritto amministrativo*, 4, 520-528 (2020); furthermore S. Franca, 'Il 'doppio binario' di legittimazione alla prova dell'Adunanza Plenaria. Quale spazio per la legittimazione soggettiva degli enti esponenziali di interessi collettivi?' *Diritto processuale amministrativo*, 4, 1030-1051 (2020).

[62] The environmental association, as well as other forms of association that claim to have been damaged by an act that is criminally relevant to the environment, are legitimately entitled to take action against the person responsible in order to obtain compensation for the direct damage they have suffered, which has damaged not only their assets but also the image of the association and has limited and/or made it impossible to achieve the association's purpose. This activity can be carried out not only through the exercise of civil action in the criminal proceedings dealing with the environmental crime, but also through the activation of autonomous civil proceedings for non-contractual liability against the responsible party. For the purposes of the liquidation of damages, it will be appropriate to provide the Judge with as many elements as possible not only to demonstrate the causal link between 'cause and effect', but also to prove the seriousness of the damage suffered, and, in particular, allow the Judge to 'calibrate' in a fair way the extent of the liquidation of damages,

resulting in opposing guidelines, is the extension of this legitimacy, ie, whether the local offices of these associations or non-recognized associations without a national or regional character may use this legitimacy to stand judicially. It should be remembered that energy justice seeks to make the energy world fairer and more equitable while remaining within the bounds of reason and proportionality. Energy development cannot be hampered by constantly new and more innovative barriers to its expansion. The problem of transition and investments also comes from here and from the many oppositions and class actions that associations, especially local ones, oppose to energy investments, even the green ones.[63]

As a result, the challenge is to strike a balance between the legitimacy to act of holders of diffuse interests, including local ones, and the development of a sector that has become critical to our society's daily well-being. Part of administrative jurisprudence has acknowledged the explicit recognition of a similar legitimacy to act for entities without a national relevance but, due to the circumscribed territorial context, are allowed to stand to protect interests concerning health and the environment in the event of inertia of a national or regional environmental association.[64] As a result, associations of any legal form, including the non-recognised ones by the Ministry of Environment, may intervene in administrative proceedings or form a civil party in a trial to seek compensation for public environmental damage. Although the courts have identified parameters and limits to this extended legitimacy by referring to concepts such as the body's organizational consistency and the requirement of the *vicinitas* (the connection between the body and the territory of reference), this judicial answer from the judges opens to a wide conception of legitimacy capable of slowing down administrative action and making many investments in the sector problematic.

A proliferation of popular actions by even non-recognized associations aimed at declaring illegitimate the granting of potential authorizations by public authorities or administrative judge decisions, or at obtaining compensation for environmental damages, for example in civil or criminal trials, if on the one

comparing the precedents of case law on the subject, see P. Dell'Anno, *Diritto dell'ambiente* (Padova: CEDAM, 2021), 400; B. Caravita (ed), *Diritto dell'ambiente* (Bologna: il Mulino, 2016), 382.

[63] Some studies have analyzed this phenomenon from a sociological point of view arguing that if on one hand people support renewable energy technologies from an environmental point of view, when it comes to welcome these investments in their territory, they show their opposition acting judicially through class action. Especially in the south of Italy several manifestations and protests took place against major investment proposal for offshore wind farms, see https://tinyurl.com/4ptz2nb5 (last visited 30 June 2022). For further readings on the sociological aspects of the 'environmental indecision' see for the international literature P.D. Wright, *Renewable Energy and the Public. From NIMBY to Participation* (London: Routledge, 2015), 368; for the Italian literature see V. Pepe, *Non nel mio giardino. Ambiente ed energia oltre la paura* (Milano: Baldini&Castoldi, 2013), 352.

[64] See *ex multis* Consiglio di Stato 2 October 2006 no 5760, Consiglio di Stato 23 May 2011 no 3107, Tribunale Amministrativo Regionale del Molise Sezione Campobasso 23 May 2009 no 249, all available at www.giustiziamministrativa.it; for the criminal case law see Corte di Cassazione-Sezione penale 7 May 2020 no 13843 e Corte di Cassazione-Sezione penale 18 September 2019 no 38596, available at www.dejure.it.

hand reinforces the intensity of a right and legitimacy exercised by national or regional associations already present in our legal system, on the other hand, it exacerbates the intensity of a right and legitimacy exercised by national or regional associations creating a problem for the economic initiatives towards the energy transition. It has been demonstrated in multiple situations how a non-national organisation was formed solely to delay an energy investment project, notwithstanding the lack of a stable link with the territory and the requirement of local community representativeness. An organization cannot be formed solely to challenge individual and specific measures.[65]

As a result, both public administrations and administrative courts must comprehend the clues and arguments coming from the bearers of diffuse interests on the one hand, while never absolutizing these arguments or the interests claimed by them without a fair balancing of the interests on the other. A balancing of interests that no longer involves a comparison between the public interest in protecting the environment and the landscape and the private interest in the free private economic initiative, but rather a comparison with another public interest of primary importance, namely energy investments to accelerate the energy transition and reduce energy inequity such as energy poverty.[66]

The administrative and judicial initiative and litigation must take into account the rise of this new public interest that is no longer secondary and it does not always have to be sacrificed.

These occurrences have frequently resulted in the suspension of approval procedures for investments in the wind power sector, for example. And the judge is increasingly deprived of effective and actual instruments, as well as skills and abilities for an analytical assessment of the facts and specific dynamics, as a result of these decisions. This raises the problem of judges' technical discretion, which will be discussed further down.

So in this sense, a reform on the access to justice and class actions in the environmental and energy sectors would be necessary, perhaps not looking at a judicial reform but maybe trying to prevent the increasing rise of disputes in front of the courts. If on one hand sometimes it is true that non-institutionalized ONG fails to carry out the balancing of interests required to undertake today by those working in the environmental or energy sectors, on the other hand, it

[65] Tribunale Amministrativo Regionale del Piemonte 25 September 2009 no 2292, Tribunale Amministrativo Regionale della Liguria 10 February 2017 no 95, available at www.giustiziamministrativa.it.

[66] It seems that the administrative courts are starting to accept and acknowledge this new interpretation. Recently, the Consiglio di Stato (Supreme Administrative Court) in a revolutionary decision regarding renewables investments, declared that the balancing of interests must not be carried out between the heritage and the private and economic interest, but between the heritage protection and another public interest given that 'the production of electricity from renewable sources is in fact an activity of public interest which also contributes not only to the protection of environmental interests but also, albeit indirectly, to that of landscape values', see Consiglio di Stato 12 April 2021 no 2983, available at www.giustizia-amministrativa.it.

would not make much sense to strengthen the right to participation for some associations and to attenuate it for others, thus undermining the legislator's *ratio legis* within the scope of Art 13 of the Law 349/1986.

Perhaps a balancing point could be found not in drawing a line between the two entitlements in front of the courts, but in making this right available to all citizens, whether individually or in groups, in the shape of a public debate that anticipates whichever decisions must be undertaken. The public debate has already existed in the Italian legal system since it has been introduced by the Art 22 of the Environmental Code as an instrument to provide for the involvement of territorial public bodies and civil society in decision-making processes on major infrastructure works that have an economic, social and environmental impact on the community.

This seems to be the most reasonable solution to draw a line between conflicting interests at stake by bringing citizens and associations into the tables and conferences of services with public authorities where the balancing between primary and secondary public interests takes place. And recently the Decreto Legge no 77 of 2021 (*Decreto Semplificazioni*) has expressly mentioned the importance of the public debate especially by establishing thresholds above which works linked to the National Recovery and Resilience Plan will have to be subjected to it, dictating measures to speed up the procedure.

So, institutionalising this procedure instead of exacerbating judicial remedies, perhaps following also the French model of the 'Dèbat Public',[67] would be useful not only to avoid further barriers to investments and social conflicts but also to pursue general objectives in terms of reducing the time taken by administrative action and the issue of transparency, guaranteeing democratic pluralism, improving public communication and empowering citizens.

3. The Italian Judicial System Towards a Just Transition

Procedural justice calls also for the understanding of who make the decisions and how to make these as fair and equitable as possible. A central role in decision-making lies undoubtedly within the policymakers and lawmakers which provides the general guidelines of a national energy policy. But, in practice, energy operations and activities are hampered by barriers erected by public authorities, first and foremost by competent ministries, and then by judges, who are tasked

[67] The reference is to the French experience of the 'Dèbat Public'. This was set up in France following virulent protests by local populations against the route of the Marseille-Lyon high-speed line. Governments decided that any major construction project should be subject to a prior public debate among all stakeholders. In order to implement the 1994 Barnier law, which was amended in 2002, an independent authority called the *Commission National du Dèbat Public* was set up to initiate and accompany the various stages of the debate on all preliminary projects for major infrastructures, see Y. Mansillon, 'L'esperienza del "dèbat public" in Francia' 3 *Democrazia e Diritto*, 101-114 (2006); J.M. Fourniau, 'Information, Access to Decision-making and Public Debate in France: the Growing Demand for Deliberative Democracy' 28 (6) *Science and Public Policy*, 441-445 (2001).

with performing a difficult procedural task: making judicial decisions that are as fair and proportional as possible and in line with the nation's current needs. As a result, it can no longer be disputed that the energy transition passes through public administrations as well as under the assessment of the courts.

Above all, judges' roles in environmental and energy economics appear to have become increasingly central and decisive in recent years, assuming roles not only as legal practitioners but also as technicians in specific sectors called upon to know, study, and examine interdisciplinary facts and dynamics.

In this contest, a part of the academic literature has landed to classify into three groups the set of courts among legal systems dealing with energy and the environment: systems that hand over environmental matters to ordinary courts, those that rely on the 'internal specialisation' of judicial bodies (the creation of green judges, without formal alterations to the judicial structure) and then, systems that create environmental courts or tribunals from scratch.[68] Italy belongs to the second group with the green and energy matters mainly devolved not to the ordinary judiciary but to a specialized judicial power, to be specific to the administrative jurisdiction. Art 133 of the Code of administrative procedure list the competencies that the administrative courts exercise exclusively, solving potentially any conflict of jurisdiction with the ordinary judicial. Art 133 *lett o)* states that:

> 'disputes, including those of a compensatory nature, relating to the procedures and measures of the public administration concerning energy production, regasifiers, import pipelines, thermoelectric power plants and those relating to transmission infrastructures included or to be included in the national transmission network or national gas pipeline network'.

It may well be observed that the energy matters are exclusively assigned to the administrative courts for both the legal position of the subjective rights (diritti soggettivi) and the legitimate interests (interessi legittimi).[69] In the energy

[68] D. Amirante, 'Giustizia ambientale e green judges nel diritto comparato: il caso del National Green Tribunal of India' *Rivista di Diritto Pubblico Comparato ed Europeo*, 4, 955-976 (2019).

[69] The evolution of administrative justice - from a power to a service for the citizen and for society – has imposed an increase in its effectiveness and efficiency, with the objective of full jurisdiction – not in a theoretical sense, but in a practical sense. This is because the administrative judge was born as an 'economic judge', in matters of public debt, which still today falls within his exclusive jurisdiction pursuant to art 133. And this genetic nature of his has only increased, consolidating more and more the extension of his control to the legal positions of both legitimate interests and subjective rights. It is immediately apparent that the review by the court has different degrees of intensity and argumentative models, depending on the matter and the type of act. The 'primacy' of the exclusive jurisdiction of the administrative judge with regard to public economic law seems to be explained, on the one hand, by the fact that the regulatory and allocative functions are performed through the exercise of a power in the proper sense, thus in line with the criteria dictated by the jurisprudence of the Constitutional Court, and on the other hand, because the multiplicity of the arbitrated items makes it extremely difficult to discriminate between the legitimate interests and the subjective rights of the various economic actors dealt with by it, see A. Pajno, 'Giustizia amministrativa e crisi economica', in

sector, in particular, the courts are being asked to evaluate all of the public authorities' actions from upstream to downstream, including energy transmission and power distribution.[70] This does not exclude them from dealing with other resources and related disputes, such as gas, coal, oil, and renewable energies.[71]

This has meant that administrative judges, especially in recent years, have started to deal with a significant and sometimes disproportionate volume of litigation concerning the energy sector due to its rapid economic expansion. As previously said, Italy does not have a substantial energy-producing capacity based on conventional resources, hence the majority of upstream investments are focused on renewable energies, resulting in increased authorisation procedures at ministries and other government agencies. In the majority of cases, administrative judges must deal with multiple case laws involving solar panels, wind turbines, transmission networks, distribution grids, and gas pipelines, which necessitates the ability to scrutinize not only binding and discretionary administrative activities but also administrative activities that are heavily influenced by technical discretion.

The judge will often then follow the acts and documents filed in court relying on his or her limited knowledge of the sector, or in other very rare cases, will make use of an expert witness's report according to Art 67 of the Code of Administrative Procedure. However, in comparison with civil proceedings, technical consultancy is increasingly rare and residual in administrative proceedings, probably due to the same limitations imposed on it by administrative judges.[72]

Considering the example of renewable energy investments such as wind farms or solar power plants which, produce energy without polluting the environment but on the other hand they often are hindered because of the potential impact

G. Pellegrino and A. Sterpa eds, *Giustizia amministrativa e crisi economica. Serve ancora un giudice sul potere?* (Roma: Carocci Editore, 2014), 408; F. Merusi, 'Il giudice amministrativo fra macro e microeconomia', in L. Ammannati, P. Corrias, F. Sartori, A. Sciarrone Alibrandi eds, *I giudici e l'economia* (Torino: Giappichelli, 2018).

[70] Among all the public bodies and the economic public bodies that play a decisive role in the energy sector, not only in the authorisation sector but also with regard to the economic incentives that many investments need, we can mention: the GSE, ARERA, the Ministries of Ecological Transition and Cultural Heritage and Economic Development, the Regions, the offices for the protection of the landscape and cultural heritage (soprintendenze) and many others.

[71] In Art 133 lett o) it is also specified the competence to deal with nuclear power but since the Italian nuclear power plants are not operative anymore, it should be interpreted as the competences to syndicate on the decommissioning operations and the ones regarding the national deposit.

[72] It must be emphasised that by resorting to those legal categories that govern civil proceedings, technical consultations known as percipient consultations (consulenze tecniche percipienti) are not permitted in administrative proceedings: those in which the consultant, subject of course to the immanent control of the judge, is called upon to ascertain the facts directly with the aid of specific technical expertise. On the other hand, in the administrative process, pursuant to art 67 of the Code of Administrative Procedure, so-called deductive technical consultancies (consulenze deducenti) are allowed, aimed at assessing ascertained facts that have already been acquired during the administrative procedure, Tribunale Amministrativo Regionale della Liguria 24 January 2014 no 137, available at giustiziamministrativa.it

on the landscape they may have. They are said to have the potential to sacrifice the visual impact (natural beauty), land subtraction for agriculture, and, in the vicinity of archaeological sites, the landscape from a historical-cultural standpoint.[73]

Faced with these hypotheses, the Public Administration to protect the landscape (in the case of the Ministry of Cultural Heritage or the Ministry for the Ecological Transition) has often intervened with comparative assessments of the interests at stake (landscape and environment vs. energy interests) letting prevail the conservation and preservation aspect based on environmental impact assessments.[74] This has inevitably led to the suspension or delay of investments and project finance initiatives.[75]

In addition to the various arguments that blame the administrative machine for the various problems concerning public spending and the stalling of the economy, some authors have also placed the administrative judge alongside it, described in turn as the 'vital organ' of the administrative machine that prevents any possibility of 'reversing the trend of expanding public spending and taxes'.[76] And this is because those institutions would have gained great authority, and appeal to the Regional Administrative Tribunal (TAR) would have been an easy and inexpensive means of reversing any decision that did not suit, which is now pervasive throughout the country. In short, the 'natural' relationship between economy and (also) administrative justice, which we have been examining thus far, would have been in jeopardy.

One agrees with those who believe that blaming the administrative justice system for the uncertainty, deadlock, and inefficiency that characterize the Italian system is at best ungenerous, given that the main causes of the crisis are an excessive number of laws, many of which are obscure and in conflict with one another, and an inefficient administration that avoids decision-making and conducts its operations in a timeframe incompatible with the needs of the public.[77]

This does not preclude assisting the administrative judge in identifying another judicial body that, due to the high level of technicality and sectorial knowledge required by this industry, might be better suited for handling this

[73] M. Marletta, 'The Role of Renewable Energy within the EU', in A. De Luca, V. Lubello and N. Lucifero eds, *The European Union Renewable Energy Transition* (Milano: Wolters Kluwer Italia, 2019), 3-40.

[74] G. Sigismondi, 'Valutazione paesaggistica e discrezionalità tecnica: il Consiglio di Stato pone alcuni punti fermi' 3 *Aedon*, 2016, available at https://tinyurl.com/mt7pjjed (last visited 30 June 2022).

[75] V. Lastrico and M.F. Gasparini, 'Il diritto ad un ambiente salubre tra standard di tutela e discrezionalità nell'utilizzo degli standard' *IRPA – Istituto di Ricerche sulla Pubblica Amministrazione*, 1-24 (2014).

[76] An authoritative politician (Romano Prodi), adding to the dose, has commented: 'if the TAR and the State Council were to be abolished, our GDP would immediately take on a conspicuous positive sign'.

[77] L. Torchia, 'Giustizia ed economia' 4 *Giornale di diritto Amministrativo*, 337-347 (2014); see also F. Patroni Griffi, '*Giustizia amministrativa: ostacolo o servizio?*', 81-90 (2014), available at /www.astrid-online.it.

massive number of significant energy lawsuits and possibly for a more concrete, proportional, and profound balancing of the public interests at stake.

4. A New Special Judge for the Energy Transition? The Case of the Superior Court of Public Waters

As previously stated, one of the procedural and legal issues that the energy industry faces is the lack of a judicial body to which the resolution of energy-related disputes is entrusted.[78] The new market dynamics and the new legal scenario opened by the energy systems have shown how the new disputes are extremely complex and technical and require multidisciplinary skills by judges.[79] The energy industry necessitates several competencies, from engineer to environmental and social ones, as well as economics, geology, and legal competences. So, the idea of a 'mixed jurisdiction' where a judicial body where a judicial panel is composed of technicians and experts in the relevant field, supervised and guided by a jurist does not see an abnormal proposal but instead new, innovative, reasonable and attractive and surely not isolated since the phenomenon of these mixed jurisdictions and the 'green judges' is spreading rapidly among the legal systems.[80]

In Italy, such a proposal must be framed having in mind the constitutional and legal provisions of the country. In fact, within the limit of the constitutional framework outlined by Arts 104-107 and in compliance with Art 102, para 2 of the Costituzione Italiana must not be overlooked the prohibition of creating new special judges in the judicial system.[81] The Legislator, in front of this express prohibition, had to broaden the administrative court's jurisdiction to cover all the rising disputes. It is evident from Art 133 of the Administrative Procedural Code, the need for the Legislator to refer these new conflicts to the court more able to deal with the multiple interests and public aspects involved (in terms of jurisdiction). But the Legislator cannot pretend from the administrative courts, competencies and deep awareness of emerging markets for which they are not trained.

The Italian legal system is familiar with the potential option of a specialised jurisdiction, which has already existed since the beginning of the last century.[82]

[78] S. Cassese, 'Verso un nuovo diritto amministrativo? *IRPA - Istituto di Ricerche sulla Pubblica Amministrazione*, 12 (2016).

[79] G. Napolitano, 'Il grande contenzioso economico nella codificazione del processo amministrativo' 6 *Giornale di diritto Amministrativo*, 667-682 (2011).

[80]See specifically the academic literature on the topic: D. Amirante, 'Giustizia ambientale' n 68 above; R. Macrory and M. Woods, 'Modernizing Environmental Justice – Regulations and the Role of an Environmental Tribunal' 72 (10) *Town and Country Planning*, 304-305 (2003); R. Jennings, 'Need for Environmental Court' 22 *Environmental Policy & Law*, 312 (1992); C. Warmock, 'Reconceptualising specialist environment courts and tribunals' 37 (3) *Legal Studies*, 391-417 (2017).

[81] A. Police, 'La mitologia della "specialità" ed i problemi reali della giustizia amministrativa' 3 *Questioni di giustizia*, (2015), available at https://tinyurl.com/mr43jjcv (last visited 30 June 2022).

[82] M. Renna and B. Marchetti, 'Il diritto amministrativo nel tempo post-moderno. I processi di

The case concerns the Superior Court of Public Waters and the relative Regional Courts. They came into being at a time when Italy was preparing for war and industrial development was taking hold and it was necessary to secure the sources of energy production for the machinery of the factories.[83] This type of judging body was born out of the economic need to regulate more efficiently the production of electricity from the exploitation of water resources. The system of jurisdiction over water took on a new and definitive structure deputed as a judge of appeal to hear disputes concerning both subjective rights and legitimate interests in all the conflicts involving the water source[84], in matters of legitimate interests, it maintained its nature as a judge of the single instance with 'direct cognition'. With the exponential increase of hydroelectric plants, especially small and medium-sized ones occurred in Italy since the early 2000s under the stimulus of a massive public policy of incentives for renewable energies and with the intensification of increasingly violent weather events, the 'Judge of Waters' today assumes a role in the system of administration of justice which is anything but secondary or marginal.[85] This is due both to the extent of the underlying economic interests and because of the fundamental strategic importance now unanimously recognised to the water resource, a precious asset and a right to be preserved for future generations.[86]

The legislator of the time (before the Constitution) decided to set up a new, so to speak, special jurisdictional body with a specialised and technical composition chaired by the President of the Supreme Court, composed of two State Councillors and two specialized members of the Superior Council of Public Works.[87] The result was the creation of a panel of judges at both central and regional levels made up of technicians in the sector (engineers, geologists) guided and monitored by a judge, by several judges. Energy is by its very nature an interdisciplinary subject and, as is only right and proper, the subjects or bodies that deliberate on it must also belong to the same interdisciplinary group. The aim was to let the judges, over time, acquire a piece of technical knowledge and specialisation that would guarantee a constant interpretation of legislation and guidance of administrative practice. Despite nowadays the Constitution prohibits the creation of special judges (Art 102 para 2), the Superior Court of Public Waters has been instituted before the Costituzione Italiana of 1948 and the scholars have argued that the Water Tribunals would not clash with the prohibition of the constitution

giuridificazione: soggetti, tecniche, limiti' 12 *Giurisprudenza.it*, 2766 (2017).

[83] S. Palazzolo, 'Acque pubbliche ed energia' *Rassegna giuridica Energia elettrica*, 342 (1996).

[84] V. Giomi, 'La controversa delimitazione della giurisdizione speciale del Tribunale superiore delle acque: punto di arrivo o punto di partenza?' 7 *Rivista nel Diritto*, 1426-1436 (2015).

[85] GSE, Rapporto statistico 2019 – Fonti Rinnovabili (GSE 2021), available at https://tinyurl.com/bdfpb93f (last visited 30 June 2022).

[86] V. Parisio, 'Acqua, servizio idrico, liberalizzazioni' *Foro amministrativo*, 1289- 1296 (2007).

[87] S. Palazzolo, 'Tribunali delle acque pubbliche' *Digesto delle discipline pubblicistiche* (Torino: UTET, 1997), 379.

since they do not constitute special courts but specialised organs of the ordinary judiciary.[88] And since the Superior Court of Public Waters and the relative regional sections continue to rule over water issues and hydroelectric power plants, it would be illogic or maybe not wise to not extend its jurisdiction to the remaining energy sector.

But which competencies would be transferred? In which legal situations would it rule?

A reform of the administrative process code could transfer the administrative judge's current exclusive jurisdiction under Art 133 lett (o) to the Court of Public Waters, which would gain jurisdiction over the resolution of energy-related disputes and rule in the same way that the administrative judge did under the exclusive jurisdiction granted by the Art 133.

The only significant difference would be that the new judicial body would decide by evaluating the facts with a group of energy experts, to make the judicial decision as fair and equitable as possible for the greater good of the public. This does not at all mean that the administrative justice system is not up to the task or that entrusting certain partial competencies to this court will solve the problems of litigation in the energy sector; it is only intended to put the spotlight on an instrument that is available in our legal system, the use of which could only bring benefits in terms of speeding up litigation in energy matters and relieving the administrative justice system of many disputes that, rather than on purely legal points, would find an easier solution with the participation of technicians, engineers, geologists and others in the decision-making panels.

This is a matter of great topical interest, which is becoming increasingly important as technology enters, or rather proliferates in law.[89] Following this path could result in the establishment of a specialized Tribunal primarily voted to resolve energy case law and possibly provide an effective boost for the energy investments that Italy requires. This will not only be a procedural remedy in the judicial system, but it will also be able to address issues of recognition, restorative and distributive justice, as well as the growing need for a cosmopolitan judge who considers not only his backyard in decision-making but the entire world and the impact that every single action can have on it.[90]

5. Special Judges and the Rise of Mixed Jurisdiction: A Comparative Analysis

As mentioned above, the model of mixed jurisdictions to protect

[88] G. Mastrangelo, *I tribunali delle acque pubbliche* (Assago: IPSOA, 2009).

[89] A. Paire, 'Appunti sul rapporto tra diritto e tecnica: il caso della giurisdizione sulle acque a cento anni dall'entrata in vigore del decreto legislativo luogotenenziale 20 novembre 1916, n. 1664, istitutivo del Tribunale delle Acque Pubbliche. Un «modello» (forse) da riscoprire?' *Il diritto dell'economia*, 547-567, (2018).

[90] R. Jennings, n 80 above.

environmental and energy issues is not a new or visionary model, but one that already operates in several national experiences. Next to the myth of the 'generalist judge' that predominates the Western context, where environmental courts are an exception and environmental litigation is normally covered by ordinary courts, following a pattern of assignment of environmental cases to different judicial bodies (civil, criminal, administrative or constitutional courts), depending on the specific subject matter dealt with in each case, it is possible to find another model prevailing in other experiences in which special courts oversee litigation in which substantive positions related to environmental, climate and energy issues emerge. Of course, environmental tribunals have several advantages: speed in evaluations, efficiency, trained and specialised judges, used to dealing with experts in the field. Normally, this model is easier to apply to new democracies based on recent constitutions, where the legal system can be based on the structural involvement of environmental issues among constitutional rights or the rights of the citizen.[91]

The most interesting feature of this new form of jurisdiction is that its 'mixed' character is manifested in its equal composition of both judicial members and experts in scientific and technological disciplines. The advantages and innovative aspects of this composition of the environmental judge are obvious. First of all, as regards technical and scientific expertise, it becomes an endogenous element of the judicial decision.[92] There is no longer recourse to external experts, who are occasionally involved, but the technical and scientific aspects of the environmental issue under consideration are all carried out within the panel, through interaction on an equal footing between members of the judiciary and experts. Secondly, the costs of technical-scientific expertise, which in environmental litigation are usually borne by the injured parties, ie the weaker interests in the process, are reduced to zero. In this sense, it has been rightly observed that providing the court with expertise produces real equality of arms and prevents strong and corporate interests from getting the better of the injured parties.[93]

On this basis, many legal experiences have arisen by creating special bodies, endowed with specific competencies regarding environmental and energy disputes. This phenomenon, since the beginning of the 2000s, has seen an impressive growth ending up in the spreading of Environmental Courts and Tribunals in

[91] A comprehensive view of the way in which the judiciary deals with environmental issues around the world obviously shows a large number of different options. Each state with its own legal system, its own history and its own specific configuration of environmental matters in the national legal system (constitutional relevance of the environment vs simple regulatory status, attributions to decentralised levels of organic or fragmented competences, etc), presents a number of variations, both in relation to the jurisdictions involved and to the distribution of jurisdiction. D. Amirante, 'Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India' 441 *Pace Environmental law Review*, 441-469 (2012).

[92] D. Amirante, 'Giustizia ambientale' n 68 above.

[93] G. Pring and C. Pring, 'Specialized Environmental Courts and Tribunals at the Confluence of Human Rights and the Environment' 301 *Oregon Review of International Law*, 302-329 (2009).

both occidental and non-occidental experiences.[94]

In Western countries, it is worth mentioning the Swedish environmental courts' system with the Regional Environmental Courts and the Environmental Court of Appeal.[95] Environmental courts have legal authority over both land use, natural resources and the environment, with civil and administrative powers but no criminal authority. Each regional environmental court must have a panel consisting of one law-trained judge, one environmental technical advisor, and two lay expert members, according to the Environmental Code.[96] In the panel's decision-making process, all four members are on an equal footing. Appeals from the five regional environmental courts are heard by the Environmental Court of Appeal in Stockholm.[97]

The judicial protection of the environment provided by these courts, although it is only one element of a broader and more articulated framework, has taken on considerable centrality because these courts have often played the role of 'pioneer' in the affirmation of many principles and institutions of environmental law. It is not surprising that the result has been to deal with environmental cases by ensuring easy access to justice for citizens, non-governmental organizations, and disadvantaged individuals and groups.

This outcome has resulted in a high level of credibility and full recognition by both the Swedish Federation of Industry and environmental NGOs,[98] especially thanks to the decision to transfer competencies and challenges relating to the natural resources, the environment and land use from the administrative courts and the National Licensing Board for Environmental Protection to the Environmental Courts. In fact, before the environmental courts' system, there

[94] In 2010, a comparative overview study on the subject, the authors have identified around 360 environmental courts and tribunals operating worldwide, most of them created in just five years (2005-2010). According to Pring and Pring, this dramatic increase has been brought about by a number of different factors, among which they identify: the development of new international and national environmental laws and principles, the recognition of the link between environmental rights and the protection of the environment, and the development of a new legal framework. and national environmental laws and principles, the recognition of the link between human rights and environmental protection, the threat of climate change and general dissatisfaction with existing general judicial forums, see G. Pring and C. Pring, *Environmental Courts and Tribunals: a guide for policy makers* (Nairobi: UN Environment-Law Division, 2016).

[95] Here Regional courts are linked to district (civil) courts, and the Environmental Court of Appeal is a division of the Stockholm Court of Appeal. Twenty regional boards and around two thousand and fifty local environmental bodies are also part of the environmental law system, see The Swedish Environmental Code 30-35, available at https://tinyurl.com/yc3bezvb (last visited 30 June 2022).

[96] The Minister of Justice is the one who appoints the judges. The court employs the judge and the technical advisor, who both work full-time as environmental judges, see The Swedish Environmental Code 30-35, available at https://tinyurl.com/yc3bezvb (last visited 30 June 2022).

[97] Four law-trained judges make up the Court of Appeal. If necessary, one of them can be replaced by a judge who has technical training in the subject matter of the appeal, see The Swedish Environmental Code 30-35, available at https://tinyurl.com/yc3bezvb (last visited 30 June 2022).

[98] B.J. Preston, 'Characteristics of Successful Environmental Courts and Tribunals' 26 (3) *Journal of Environmental Law*, 365-393 (2014).

was a National Licensing Board for Environmental Protection, which functioned similarly to a court of justice.[99] When the environmental courts took over the licensing board's most important role, balancing diverse interests against one another, they were given the task of weighing the harm to individuals against the economic benefits of the firm causing the harm, to find the most reasonable and proportionate balance point.[100] For a judge in an environmental case, this is a critical — and challenging — responsibility, because the consequences of a court's ruling frequently extend well beyond the interests of the parties directly concerned. And it has been acknowledged that finding the optimum equilibrium point is made easier by reserving the final decision to technical expertise and qualified judges. This expressly represents a testament to the Environmental Court's success in Sweden.

Another example worth to be mentioned can be explored by looking at non-occidental experiences which show that a mixed jurisdiction with sectorial competence is widespread over the world.

This particular example refers to the National Green Tribunal of India (NGT).

This judicial body was established in 2010 to fulfil a specific request of the Supreme Court to set up a judicial body for '*the effective and expedition disposal of cases relating to environmental protection and conservation of forest and other natural resources*'.

The requirement expressed by the Supreme Court did no more than interpret and describing a widely diffused issue in legal systems around the world, where the increased interaction between law and science certainly opens up new frontiers and challenges. In particular, we can recall the famous *A.P. Pollution Control Board* v *M.V. Nayudu* judgment of 1999, in which the Indian Supreme Court stated that the difficulties encountered by judges in dealing with cases based on scientific or technological issues were widespread.[101] The Indian Supreme Court stated that these difficulties faced by judges in dealing with cases based on highly complex scientific or technological issues have become an increasingly common phenomenon, and that uncertainty creates problems when scientific assessments are institutionalised within public policies or used as elements of decision-making by public administrations or judges.[102]

On these premises, a special and mixed jurisdiction was needed to comply

[99] There was a National Licensing Board for Environmental Protection, which functioned similarly to a court of justice, before Sweden implemented the environmental courts system. The board's chairman and his deputies were both lawyers who had previously served on an Appellate Court. A total of five water courts were also available. The Code developed an environmental court system to replace all six of these institutions, see U. Bjallas, 'Experiences of Sweden's Environmental Courts' 3 (1) *Journal of Court Innovation*, 178-184 (2010).

[100] C. Wang, 'A Comparative Analysis of Environmental Courts in Sweden and China' 9 *Fudan Journal of the Humanities and Social Sciences*, 607–626 (2016).

[101] *A.P. Pollution Control Board* v *M.V. Nayudu AIR* 1999 Supreme Court 812:1999 AIR SCW 434, available at www.main.sci.gov.in.

[102] G.N. Gill, 'A Green Tribunal for India' 22 (3) *Journal of Environmental Law*, 461-474 (2010).

with the application of environmental legislation and the achievement of its objectives. Therefore one of the main NGT's features is its constitution: it comprises both ordinary judges and expert members coming from the scientific and technical disciplines, with a 50 per cent ratio.[103] It represents, thus, a 'mixed jurisdiction' where members not having a legal background can adjudicate a case with their decisive vote.

The Court and the high level of expertise of its members have shown over time that they can use this knowledge to correctly balance the interests at stake, sometimes in favour of environmental protection and sometimes in favour of the economic development of a country without judicially blocking the energy investments that the country needs to meet its daily energy needs.

In this context, the debate around the Superior Court of Public Waters does not seem visionary or far standing from a legal design point of view. The case for special judges with the feature of mixed jurisdiction is actual and it has shown positive outcomes all around the world in both developed and developing countries.

The comparative exercise consistently demonstrates the value of investigating foreign legal experiences and normative answers to real-world problems to learn from them and adapt them to the national legal system. It is undeniable that the science of comparative law holds a genetic vocation to weighing the unity of peoples through the unity of laws.[104] This conception gives comparative law a universal and cosmopolitan purpose. And it is within this purpose that the rigorous technique of comparative law has evolved so quickly, particularly in the Italian academic literature.[105] As a result, comparative law can assist a national legal system by generating recommendations and remedies based on knowledge of other legal systems that are comparable to the own legal system or confront similar problems: a comparative law approach that aims to achieve legislative unification[106] and the conceptual creation of the '*common law of civilised mankind*', setting out universal principles and solutions to common problems that affect legal systems where the free use of arbitrariness coexists with the freedom of

[103] The 'technical' members of the Green Tribunal must be highly qualified and, in particular, hold a master's degree or doctorate in science, engineering and other technological subjects. They must also have at least fifteen years' experience in their respective fields and at least five years' experience in the environmental sector. Experts may also come from the administration and civil society, including NGOs, but must have similar characteristics to their scientific colleagues (fifteen years of working experience of which at least 5 years in the environmental field), see The National Green Tribunal Act, No 19 of 2010, 5(2)(b), India Code, vol 19 (2010).

[104] V. Pepe, *Giambattista Vico e la comparazione giuridica* (Napoli: Edizioni Scientifiche Italiane, 2020), 148.

[105] T.E. Frosini, *Diritto pubblico comparato. Le democrazie stabilizzate* (Bologna: il Mulino, 2019), 10.

[106] G. Gorla, 'Unificazione legislativa e unificazione giurisprudenziale. L'esperienza del diritto commune' *Foro italiano*, V, 91-120 (1977) 1; R. Sacco and A. Gambaro, *Trattato di Diritto comparato - Sistemi giuridici comparati* (Torino: UTET, 2018), 1-6.

each individual.[107] A cosmopolitan law of freedom aimed at the coexistence between individuals. A law born from the awareness of the cosmopolitan essence of our human, cultural and social evolution.[108]

V. Final Considerations

In today's society, the existence of climate change is a scientific certainty. It has an impact on national economies, resulting in high costs for individuals, communities, and countries that will become even more significant in the future. Energy development, the primary source of CO2 emissions, is undergoing an evolutionary phase right in front of everyone's eyes. The concept of energy justice is now well established, and there is a widespread conviction that it will pave the way for the energy transition and for making it a just transition. The stakeholders' goal is to identify which national measures and aspects should be prioritized to accelerate the process and make it real and concrete. This study was primarily voted to identify some of the numerous and major challenges that Italy may face as it transitions to a low-carbon economy. To ensure a just transition, the energy sector must be read and analysed through the energy justice framework, which is both a methodology and a metric used to shape lawmakers' decisions. All the energy justice principles carry elements and aspects on how the energy sector can be fair and equitable balancing all the several interests involved.

There are now significant actions to do to move forward and build on. More study is needed on energy justice, as well as the involvement of more stakeholders in the initiative. The studies must be critical of the energy industry, attempting to explain the flaws and putting energy justice into practice to address those weaknesses.

I have discovered that the Italian legal and judicial systems have some flaws in terms of recognition, distributive and especially procedural justice, and I am considering how to introduce instruments for a more equitable and proportional response to energy case law to achieve energy justice in practice. So energy justice is from theory to practice. As a result, researchers must accelerate efforts by pointing out flaws and answering, creating a 'perfect storm'.

One of the recent triggers is the appointment by the Biden Administration, within the first twenty-four hours of his presidency of a Deputy Director of Energy Justice, professor Shalanda Baker.

[107] C. Petteruti, *Diritto dell'Ambiente e dell'Energia. Profili di Comparazione* (Napoli: Edizioni Scientifiche Italiane, 2020), 12.

[108] Law cannot only look at social relations within a single community but it must explore contacts between multiple communities, especially how to make them more united in pursuit of the common good. These are the thoughts of the famous Neapolitan philosopher and jurist Giambattista Vico. See G. Vico, *Principi di Scienza Nuova. Intorno alla comune natura delle Nazioni* (Napoli: Belle Epoque, 2019), 560.

The institutionalization of energy justice by entrusting it to a US administration office symbolizes that there can be no energy transition without greater social justice. The initiatives of the US office are aimed at inclusivity and equality, which must accompany the transition to a future-friendly ecosystem. The clean energy revolution must lift all those who have been left behind and ensure that those who have suffered the most benefit first. It is no coincidence that this office has been led by a law professor to encourage public policies that look at the energy sector through the energy justice metric and also of stimulating the national court for the further implementation of energy justice in practice. And following the US example, an Italian energy justice office formed at the Ministry of the Ecological Transition formed in 2021, might assist Italian laws and policies in identifying and studying the different injustices that occur in the energy industry, to suggest solutions, as this study attempted. In these circumstances, there is a growing consensus that the energy justice framework is the only viable way to enforce the low-carbon transition. Only by following the directions of the energy justice principles, it will be possible to develop public solidarity within a new energy ethic that is not only superficial but also profound.

In reality, the research presented here aims to show that energy justice is based on the protection of human rights. All attempts to investigate energy justice in the Italian legal framework have revealed the rise of human rights and how they are sometimes not fully realized, necessitating greater protection: from energy poverty, access to modern energy services, and energy security to the access to justice, participation rights, and the right to a fair and equitable decision. All five parts of energy justice: procedural, distributive, restorative, recognition, and cosmopolitan regard these human rights as essential to accomplishing and implementing energy justice and the energy transition. In this instance, national courts provide a forum for resolving conflicts and ensuring the protection and fulfilment of human rights. The key justice concerns and how they should be resolved will be determined there. The conflict usually emerges as a result of the actions of a stakeholder in the energy sector, in a situation where there is no existing legislation on the subject or where the legislation is unclear. As a result, these national courts play a futuristic role, interpreting what justice is under the law and what it should be in light of current societal goals.[109]

These legal institutions must respond to current public policy and, in essence, they can be said to have the job of establishing and guiding the rules of the game in the energy sector. They define the boundaries of acceptable behaviour, which is usually set by the government or energy business. National courts provide a final option to hold a government or energy business accountable for their conduct and guarantee that the energy sector is just. And, to achieve these goals and objectives, national courts must be 'prepared' and 'well-equipped' to

[109] R.J. Heffron, 'Applying energy justice into the energy transition' 156 *Renewable and Sustainable Energy Reviews*, 111936 (2022).

make the fairest and equitable justice for the entire society and future generations. The creation of special judges with mixed jurisdiction could undoubtedly aid in preparing national judicial systems to respond to current societal needs, such as the need for more experts capable of interpreting environmental, climate, and energy legislation based on an interdisciplinary comparison capable of considering and integrating the various elements (scientific, political, administrative), as we observed in other countries.

In this context, the judicial protection of the environment, while representing only one element of a broader and more articulated framework, is of great importance because the courts will play the role of 'pioneer' in the affirmation of many principles and institutions of environmental and energy law.

And as pointed out by the 2018 Nobel Prize in economics, William Nordhaus – what is urgently needed, in the face of the global warming emergency, is not so much response in terms of technical-scientific elaboration, but rather the adoption of legal solutions that are as close as possible to the empirical – evidence on the trend in greenhouse gas emissions into the atmosphere.[110]

[110] W.D. Nordhaus, 'Projections and Uncertainties about Climate Change in an Era of Minimal Climate Policies' *National Bureau of Economic Research Working Paper No. 22933*, 2-49 (2016), available at https://tinyurl.com/2p8ttwsm (last visited 30 June 2022).