

EELF 2023

European Environmental Law Forum Conference 2023

ENVIRONMENTAL LAW IN TRANSFORMATION –
LEGAL IMPLEMENTATION AND IMPACTS
OF THE EUROPEAN GREEN DEAL

30 August – 1 September 2023, Leipzig

Book of Abstracts

I A: Climate & Energy / Climate Targets & Laws

The Paris Targets and EGD: Legal Arguments in Favour of Smaller Carbon Budgets

Felix Ekhardt

Research Unit Sustainability and Climate Policy, Leipzig

The Paris Climate Agreement (PA) provides an overall target which limits global warming to “well below 2 °C above pre-industrial levels” and “pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels” (Art. 2 para. 1 PA). This contribution assesses the extent to which new insights can be derived from recent IPCC reports for the interpretation of Art. 2 para. 1 PA from a legal perspective. To this end, it analyses the contributions of Working Groups I and III of the sixth assessment report. Methodologically, the presentation compares the findings with previously published IPCC reports, namely the 1.5 °C report and the fifth assessment report. A legal interpretation of the Paris Agreement and of core concepts of human rights follows. Several empirical indications show that current global greenhouse gas budget calculations – also those implied by the EGD – are quite generous. The contribution provides several empirical arguments that clearly point in that direction. These empirical arguments, combined with legal arguments, demonstrate that the budgets must be smaller than those estimated by the IPCC (and by the EGD). The legal arguments are based on Art. 2 of the Paris Agreement, as well as on human rights and the precautionary principle. These norms contain an obligation to minimise the risk of significant damage, i.e., to take rapid and drastic climate protection measures. This implies: 1.5 °C is the legally binding temperature target; adherence requires a very high probability of achieving the target; temperature overshoot and geoengineering tend to be prohibited, and budget calculations must be based on sceptical factual assumptions. These findings have also been confirmed by recent rulings of supreme courts, such as the ground-breaking climate decision of the German Federal Constitutional Court. The Paris Agreement and human rights underline a legally binding obligation for smaller global greenhouse gas budgets as those estimated in the greenhouse gas budgets of the IPCC—even compared to the 83 percent scenario in the latest assessment. Thus, EU climate policy will have to raise its ambitions towards zero fossil fuels and a drastic reduction of livestock farming in times of the Ukraine war.

I A: Climate & Energy / Climate Targets & Laws

In search of a national Climate Change Act in light of the European Green Deal

Eva Balounová

Institute of State and Law, Czech Academy of Sciences

Some sort of national framework legislation on climate (national Climate Change Act) exists in more than 10 European countries. In 2021, such framework legislation on climate was adopted by France, Spain, Portugal, and at the European Union level (European Climate Law). A national framework legislation on climate in the Czech Republic is missing and its climate performance is low. Furthermore, the Czech state is already facing several climate lawsuits (on the national level and in front of the European Court on Human Rights). In 2022, the Prague Municipal Court as a first instance court confirmed the low climate performance of the Czech Republic in the first Czech strategic climate litigation, yet the Supreme Administrative Court overturned this decision in February 2023. The main reason for the annulment of the first instance decision was the collective character of the EU's obligation to reduce its GHG emissions by 55 % by 2030 and the fact that the specific distribution of the obligations to Member States is currently still subject to legislative and political negotiations. However, the Supreme Administrative Court left the door open for further specification of the climate lawsuit or other climate actions.

At the same time – in February 2023 – a seminar concerning drafting the national Climate Change Act was organized in the Parliament of the Czech Republic. This contribution, therefore, summarises the preparation work on the first Czech Climate Act and even more importantly proposes the content of such an act. The contribution to the debate concerning drafting the Climate Change Act includes three parts: i) findings from a comparative study of national framework legislations in Europe (i.e. most important elements of the acts), ii) lessons learned from the current case law (including the Czech climate litigation), and iii) requirements from the EU law after the European Green Deal (i. e. Fit for 55, etc.).

The preliminary findings of the contribution are that although the adoption of a national framework legislation on climate in the Czech Republic is not necessary, it may demonstrate national ownership of the climate action responsibility in the Czech Republic, including national climate targets; provide institutional arrangements; strengthen public participation; and establish obligations of the regions and municipalities.

I A: Climate & Energy / Climate Targets & Laws

The reach of EU competences in the low-carbon energy transition

Kaisa Huhta,

Eastern Finland

European Union (EU) constitutional law imposes several limitations on the use of the EU powers in the energy sector. Article 194 of the Treaty on the Functioning of the European Union (TFEU) provides that EU energy policy may not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources or the general structure of its energy supply. In the same vein, Article 192 TFEU requires unanimity by the Council on environmental policy measures that significantly affect a Member State's choice between different energy sources and the general structure of its energy supply. Furthermore, Article 172 TFEU, which governs the guidelines for establishing and developing trans-European energy infrastructures, requires that the guidelines and projects of common interest that relate to the territory of a Member State require the approval of the Member State concerned.

These competence limitations are directly connected to the success of EU climate policy because it requires that the emissions caused by energy activities are significantly reduced. In this context, the share of low-carbon energy production in the overall energy mix must increase, which necessarily requires measures that seem to overlap with these constitutional competence limitations. This presentation explores the scope and interpretation of the EU's competence limitations in the energy sector and their implications on the low-carbon energy transition. In particular, the presentation examines the division of powers in the EU energy sector in the light of recent case-law from the EU courts. It shows how these competence limitations in EU energy law are interpreted in practice and how they are likely to influence the reach of the EU's in the low-carbon transition.

I A: Climate & Energy / Climate Targets & Laws

Integrating Carbon Dioxide Removal into the Climate Regime: Draw some new distinctions!

Till Markus

Helmholtz - Centre for Environmental Research

The IPCC has repeatedly argued that removing CO₂ from the atmosphere will be necessary to achieve the Paris Agreement's temperature goals. As a result, the European Union and its Member States have adopted negative emission objectives. CO₂-Removal, however, differs substantially from traditional mitigation and adaptation activities and it does not fit well with existing climate law concepts. To adequately govern removal activities it will be necessary to a) distinguish precisely how these new approaches differ from existing and emerging climate related actions, and b) clarify how they can best be integrated into the climate regime. To this end, clear-cut analytical categories will be suggested that discern measures avoiding the generation of greenhouse gases (avoidance), preventing their emission (retention), and those removing CO₂ from the ambient air (removal). Given measures' varying effects on the climate system as well as other goods and interests, new rules must be developed for removal activities. At a basic level, for example, separate targets for avoiding, retaining, and removing CO₂ have to be adopted to prevent the so called mitigation deterrence effect.

I B: Biodiversity / Concepts & Rights

The Habitats Directive as an Expression of the Rights of Nature

Hendrik Schoukens¹; Yaffa Epstein²

¹ Ghent University; ² Uppsala University

Spain recently became the first European country to explicitly grant rights and legal personhood to a natural entity, the Mar Menor lagoon and basin. This new law has been both celebrated and criticized by legal experts. One of the justifications for the personhood of Mar Menor is that despite its legal protection under Spanish and EU law, it is badly polluted by fertilizers and other effluents, amongst other environmental problems. In this presentation, we compare ecosystem protection under the Habitats Directive, the Mar Menor legal personhood law, and the proposed EU nature restoration regulation. We examine the similarities and differences in existing and proposed EU legislation and explicit legal rights, and analyze what personhood might add to traditional environmental legal protection for Mar Menor or other ecosystems. Can explicit legal rights really lead to improvement in the environment, or is this new law just a reiteration of existing protection?

I B: Biodiversiy / Concepts & Rights

Granting Rights of Nature to the Wadden Sea: A Critical Analysis from a European Law Perspective

Julian Boer

Utrecht Center for Water, Oceans, and Sustainability Law

The Rights for Nature movement is rapidly gaining ground in Europe. No wonder, especially now that it appears to be an attractive and elegant means of improving the sometimes worrying state of nature. In the Netherlands, too, initiatives to have nature reserves recognised as legal entities have mushroomed recently. Associations, activists and scientists, are, inter alia, calling for rights to be granted to the Wadden Sea (Lambooy et al., 2022, Den Outer 2023). This plea has now aroused interest at the (highest) political level: ministries are referring to it in policy frameworks, local councils are discussing it, and several (coalition) parties in the lower house of parliament are even preparing bills to grant rights to the Wadden Sea and to enshrine the rights of nature in the constitution. The promises are great: by granting rights to the Wadden Sea, not only would its intrinsic value finally be recognised, but environmental quality would improve and biodiversity would recover, as both citizens and governments would (have to) take the interests of the Wadden Sea more into account.

It is striking how little attention has been paid to the European legal framework in the (scientific) debate on the granting of rights to the Wadden Sea. The Wadden Sea is not only a Dutch but also a European natural asset, and as such EU environmental law is highly relevant to the discussion on its management and protection. The European Water Framework Directive, which also applies to the Wadden Sea, is an essential point of reference, as are the Habitats Directive and the European Green Deal (EGD), including the proposed Nature Restoration Act. The question is therefore how such a revolutionary proposal as rights for the Wadden Sea fits into this European environmental legal and regulatory framework. To what extent are there grounds to believe that rights for the Wadden Sea will do more to improve environmental quality and strengthen biodiversity than existing and future European rules and packages, especially as it's already one of the best protected and managed nature reserves in Europe? Is it more than just symbolic? And how is this promise supported in the relevant literature?

The central aim of this paper is therefore to examine how granting rights to the Wadden Sea fits into the EU environmental law framework, and, from this starting point, to critically reflect on the idea that granting legal personhood to this intertidal area will improve its quality. In this respect, the paper fits in well with the theme of this conference, since granting rights of nature to certain areas will certainly have consequences for the implementation of the EGD. In particular, it fits in with Theme A, which focuses on the overarching and constitutional aspects of the EGD and the role of law in societal transformation.

I B: Biodiversiy / Concepts & Rights

Are Net Improvements still in? Legal Perspectives from the new Global Biodiversity Framework for the EU-Biodiversity Strategy's Net Gain Approach

Volker Mauerhofer

Mid Sweden University

In December 2022 the Kunming-Montreal Global Biodiversity Framework was internationally concluded (in the following "GBF"). It aims to steer Biodiversity Governance, Policy and Laws towards a vision of living in harmony with nature. This should be reached 2050 at the latest with first tangible targets to be achieved by 2030. The GBF builds upon prior policy processes and seeks to complement ongoing ones. Already in 2020, the European Union (EU) has launched its Biodiversity Strategy that includes a Net Gain Approach.

The presentation aims to provide an overview on the wider political embedding of the GBF, and to elaborate the development, novelty and implementation of the GBF in relation also to the EU-Biodiversity Strategy. In this connection it will particularly ask

1. in how far the final version of the GBF still contains the requirement for global net improvements of the former versions and
2. in how far overall flexibility for the GBF's implementation has been increased in the final version during the concluding political negotiations, and
3. in how far the GBF in its latest version relates to the net gain approach of the EU Biodiversity Strategy and its legal implementation.

Hermeneutic methods are applied such as comparative legal analyses and different types of text interpretation (e.g. historic, wording, rational).

In terms of results the presentation will elaborate

- a. how during the process of negotiating the GBF its theory of change, its mission and its structure were modified towards an at least less clear global net improvements approach,
- b. how during the final political negotiations, the nations increased through certain additional clauses their discretion when implementing the GBF and how those clauses were strategically positioned in this context, and
- c. based on these modifications, an outline of major legal implementation challenges and perspectives of the GBF in particular for the legal implementation of the Net Gain Approach in the EU Biodiversity Strategy.

The final negotiations on the GBF levelled the path to conclude this new framework in December 2022. While theory of change and mission of the GBF seem to have during the negotiations received a more varying and less concrete wording for further legal implementation, particular due to skipping from the former versions the explicit requirement of net improvement by 2050. Additionally, the new inclusion of several clauses referring to taking into account national circumstances, priorities and socioeconomic conditions/capabilities during the implementation of the Goals and Targets will significantly affect the legal measures that will be taken. This might be less valid for measures taken by the European Union and its Member States due to the clear orientation of the EU Biodiversity Strategy from 2020 towards achieving Net Gains by 2050, similarly expressed also in the EU Circular Economy Action Plan from 2022.

I B: Biodiversity / Concepts & Rights

The last of us: preventing further deterioration of Europe's remaining nature

An Cliquet PhD

Ghent University

According to the preventive principle, damage and deterioration of nature have to be avoided. An application of a non-deterioration obligation of habitats can be found in article 6, § 2 of the EU Habitats Directive, holding a non-deterioration clause for the Natura 2000 sites. This provision has been clarified by the EU Commission in its guidelines on article 6, and has been dealt with by the EU Court of Justice in several cases (including the Spanish brown bear case). The Habitats Directive also includes a non-deterioration prohibition in article 12 on protected species, through prohibiting deterioration or destruction of breeding sites or resting places. Non-deterioration clauses are trying to find a balance between existing human activities and nature protection. In spite of the non-deterioration clauses in the Habitats Directive, the state of most habitat types and protected species in the EU is unfavourable.

The EU Biodiversity Strategy 2030 therefore commits to raise the level of implementation of existing legislation within clear deadlines. Member States will have to ensure no deterioration in conservation trends and status of all protected habitats and species by 2030. The proposal for an EU nature restoration law (EU Commission, June 2022) includes non-deterioration clauses for terrestrial and marine habitats covered by the proposal. The non-deterioration clauses are twofold: firstly, areas that have been restored and in which good condition of the habitats and sufficient quality of the habitats of the species has been reached, cannot deteriorate. Secondly, the non-deterioration clause of the Habitats Directive is extended beyond Natura 2000 sites and applies now to all areas where habitat types mentioned in Annex I and II of the proposal can be found.

These additional non-deterioration clauses give rise to concern amongst EU Member States. However, several legal arguments can be raised in support of these non-deterioration obligations, including consistency with other international and EU commitments and legal obligations. Aside from the legal arguments, there are ecological reasons to expand the non-deterioration clauses, as well as financial reasons, as it will be less costly to prevent further deterioration than having to restore degraded areas later.

Still, the application of non-deterioration clauses, especially outside protected areas, will give rise to uncertainties and questions on the concrete consequences for human activities. These issues will be explored, including legal-ecological questions on what is understood by good condition, what are the thresholds to invoke the non-deterioration clauses, the cumulative effects ('death by a thousand cuts'), etc.

I C: Overarching / Principles & Strategies

Innovation, Precaution and Sustainable Development in EU Environmental Law – an Obvious Triangle?

Tellervo Ala-Lahti¹; Leonie Reins²

¹ University of Helsinki; ² Erasmus School of Law

The precautionary principle (PP) has been “norm-setting” in terms of defining the way technologies should be regulated. The principle causes operators to consider responsibility for producing the scientific evidence necessary for a comprehensive risk evaluation. However, by some, it is claimed that the PP would cause excessive risk aversion, hindering innovations. As a response, European Risk Forum (ERF) presented the “innovation principle” as a counterbalance for PP. Nonetheless, the IP lacks scientific basis since its origin in European Union’s politics is based on an open letter to EU institutions from ERF, which is constituted of 12 CEOs who together were investing more than €21 billion annually in innovation. At the same time, European institutions had recognized bottlenecks for innovations within existing policies and legislation. Therefore, the Innovation Principle has been mentioned as a part of several policy documents along with the Research and Innovation Tool of the Better Regulation Toolbox. Yet, compared to the definition provided by ERF, the IP has evolved during its implementation of the Union’s policies. According to EU Commission, besides encouraging innovations, policies and legislation should cover the environmental, social and economic objectives of the EU while anticipating and harnessing future technologies. Consequently, the ambiguity about IP’s relationship with the environmental principles, especially the balance between PP and IP as well as their ties with principles of sustainable development and proportionality, needs to be investigated to understand the possible inconsistency of the novel innovation principle in relation to existing regulatory guidelines and tools. Since precaution already encompasses the concept of (sustainable) economic development while the principle of sustainable development requires to consider economical aspects in relation to sustainability, the purpose of the innovation principle, which is developed for the same purposes, remains unclear.

I C: Overarching / Principles & Strategies

EU Green Deal and the environmental integration principle: In search of an enhanced substantive meaning of the principle

Vasiliki Karageorgou

Panteion University of Social and Political Sciences

The European Green Deal (EGD) is the new EU growth strategy that aims to respond to contemporary and urgent environmental and climate realities by fostering the EU's transformation to "a fair and prosperous society, with a modern resource-efficient and competitive economy" by 2050. The fundamental transformation towards sustainability and to an economic model decoupled from resource use is associated with the fundamental objective of climate neutrality. The achievement of this central objective presupposes the adoption and implementation of legislative measures and policies in all or nearly all sectors of EU economy. Furthermore, another central characteristic of the EGD is that it places emphasis on the protection and the preservation of the EU's natural capital and the protection of the health and well-being of the citizens from negative environmental impacts. The achievement of the EGD objectives presupposes the effective implementation of the environmental integration principle (Article 11 TFEU). This, in turn, requires the incorporation of the environmental considerations into the regulatory instruments in fields outside Environmental Law. However, the EGD Communication does not expressly mention the environmental integration principle as such. Instead of this, it includes a section on mainstreaming sustainability, in which 'green finance and investment', 'greening of the national budgets' as well as research, innovation and education are singled out as areas in which action should be taken. The main aim of the proposed presentation is to examine whether the EGD and its accompanying legislative initiatives have given new impetus to the environmental integration principle. More particularly, it will be examined whether these new developments re-enforce the substantive meaning of the principle in a manner that goes further than a mere consideration of the environmental impacts of the various legislative instruments and policy initiatives and presupposes that the environmental aspects exert influence on the substantive content of the legislative documents adopted or the decisions taken. In order to answer the question above, the regulative content of the environmental integration principle will be analyzed separately, yet also in conjunction with the objective of sustainable development, as enshrined in EU Primary Law. Furthermore, the relationship between the environmental integration principle and the "do no harm" principle, which has been introduced in the EGD Communication, is examined (including its further determination as the "do no significant harm" principle in certain legislative instruments). Then, the legislative and policy initiatives that have been adopted with the aim to achieve the EGD objectives in two selective fields, namely the EU energy and climate policies and the EU Industrial Policy will be analyzed. This will allow for certain concrete conclusions concerning the influence that the environmental integration principle exerts on the determination of the content of the respective policies, and its contribution to policy coherence. As the implementation of the environmental integration principle is associated with the achievement of EGD objectives, it is also expected to give rise to conflicts with other core objectives of the EU Law (e.g. economics interests). The final focal point regards such arising conflicts and their

I C: Overarching / Principles & Strategies

Retooling the principle of integration under the EU Green Deal – The nexus between public procurement and climate change

Matteo Fermeglia¹; Aura Iurascu¹; Kleoniki Pouikli²

¹ Hasselt University; ² Utrecht University

The legally binding objective of climate neutrality by 2050 enshrined in the EU climate law constitutes the EU's response to the increasingly pressing global issue of climate change. Recognizing that the current climate crisis verged on the climate emergency level, the European Commission in its EU Green Deal posited the “commitment to tackling climate and environmental-related challenges [as]...this generation's defining task”. This transition, in line with the EU's commitment to global climate action under the Paris Agreement, requires mobilizing the “collective ability to transform its economy and society to put it on a more sustainable path” via a “set of deeply transformative policies”. In this vein, climate neutrality is placed at the epicenter of the EU's integration process which moves beyond the tradition economic regulation and calls for a renewal of the European construct beyond the consolidated acquis.

To this end, an integral element in achieving the fundamental transformation required by the EU Green consists in re-shaping the way EU policies interact. In this context, the existing nexus between public procurement and climate change needs to be discussed in light of the ambitious regulatory project of climate neutrality, since the Commission has stated that ‘public authorities, including the EU institutions, should lead by example and ensure that their procurement is green.’ Likewise, the Paris Agreement has acknowledged and recognized developed countries' leading role in adopting sustainable consumption and production patterns to address climate change. Signatory countries of the Paris Agreement must undertake ambitious efforts through nationally determined contributions to achieve reduction emission targets. It has also recognized the importance of engaging all levels of government, using various actions and instruments, and noting the significant role of public funds. Furthermore, the last IPCC report has once again stressed the significant market power of public procurement as a driver for strategic environmental goals and its ability to create niche markets to guarantee demand for low-GHG products and materials.

Although the link between public procurement and climate change is clear, under the EU public procurement legislation, public buyers have the right, and not an obligation, to procure green or sustainable. Therefore, delivering public procurement with reduced GHG emissions (green public procurement or low carbon procurement) is still applied voluntarily. In this context, the principle of integration enshrined in Article 11 TFEU emerges as a potential catalyst to overcome the established/traditional compartmentalization of the EU policy sectors and give effect to the highly transformative force of the climate neutrality binding goal. Although the normative impact of the principle of integration has not been adequately explored yet, the need to operationalize its content is more pertinent than ever given its guiding potential/power when balancing conflicting interests of different policy domains.

Against this backdrop, the aim of this paper is to unpack the legal impacts of the principle of integration in the context of low carbon procurement, since it might be key in achieving the fundamental transformation required by the EU Green Deal.

I C: Overarching / Principles & Strategies

Competition law as a lens for more sustainability

Hans Vedder

University of Groningen, The Netherlands

Competition law is good at many things. One is to reduce complex economic phenomena to a manageable core that can be subject of a structured legal debate. This paper therefore posits that competition law can function as a lens to enable and incentivise higher levels of sustainability.

I do this by first identifying the well-known mechanisms that underlie the lack of sustainability (e.g. externality, public goods, information asymmetries and bounded rationality). These findings are then reflected upon from a competition and competition law perspective. This yields what I call a competition law lens: a way of analysing the private and public responses to observed instances of unsustainability (i.e. private cooperation or inaction, legislative or executive interventions or inactions) to identify the core issues at stake. For example, environmental agreements, the competition law responses to such agreements, subsidies for energy transition and the CBAM and - most importantly - their shortcomings can all be explained using this lens. This means that the lens can also be used to repair these shortcomings or at least identify a clear pathway to such repairs.

My paper will focus on the energy sector as a prime example of significant transitions that are required for sustainability, but where actions are lagging behind what is needed. I will address the entire current energy value chain as well as new value chains and their regulation.

I D: Pollution / Environmental Quality

Meeting environmental objectives - does the programmatic approach deserve a second thought?

Cancelled

Helle Tegner Anker

University of Copenhagen

The EU has set rather ambitious environmental objectives for both aquatic and terrestrial ecosystems as reflected in the Water Framework Directive and the Habitats Directive. Although several years have passed, the actual achievement of the environmental objectives is still lagging behind – not least when it comes to terrestrial ecosystems protected under the Habitats Directive. This implies both a failure to reduce pollution, e.g. agricultural nutrient pollution, but also a failure to take active measures to restore ecosystems, and possibly a failure to ensure coordinated action.

Restoring nature is a key element in the European Green Deal and the proposed Nature Restoration Regulation may be an important legal instrument. The road for such a new piece of legislation may, however, be long and winding. The Green Deal also emphasises that all EU actions and policies should pull together to help the EU achieve a successful and just transition towards a sustainable future.

One approach that may deserve a second thought is the programmatic approach, also in relation to the Habitats Directive. A programmatic approach comes in different forms, but a common denominator is the formulation of specific objectives and measures, including restoration measures, and associated assessment at a more aggregate level than individual projects. The Water Framework Directive embodies a programmatic approach requiring the adoption of programmes of measures with the purpose to achieve the environmental objectives. The Habitats Directive is less explicit although Article 6(1) sets an obligation to establish necessary conservation measures for habitat types and species in Natura 2000 sites. Yet, the main focus of the Habitats Directive has been Article 6(3-4) in relation to the assessment of individual projects.

The CJEU appears to have accepted the potential use of a programmatic approach e.g. as regards diffuse nitrogen pollution both in C-293/17 and C-294/17 (PAS) and more recently in C-278/21 AquaPri. Yet, the CJEU has also reiterated the strict criteria for the assessments and conclusions to be complete, precise and definitive. Thus, in practice the role of a programmatic approach appears to be limited at least when it is linked to permits for individual projects.

This presentation aims to identify and discuss important elements for the further deployment of a programmatic approach under the Habitats Directive by drawing comparisons with the WFD, in particular with a view to diffuse nutrient pollution. This includes the important issues of how to accommodate the quest for complete, precise and definitive findings as well as the linkages between a programmatic approach and permits for individual projects.

I D: Pollution / Environmental Quality

Environmental quality as a European regulatory strategy for sustainability transformation

Antti Belinskij

University of Eastern Finland

The EU Green Deal sets ambitious objectives for the quality of the environment. EU environmental law already reflects these objectives when regulating, for example, climate change mitigation (EU Climate Law) and freshwater (Water Framework Directive) and marine environment (Marine Strategy Framework Directive) quality targets. Moreover, the proposed EU Nature Restoration Law aims to achieve nature restoration objectives. Thus, the EU is largely utilising quality-based regulatory strategy to achieve the sustainability transformation called for in the EU Green Deal.

In general, environmental law includes both emission and quality-based regulations. For example, the EU Industrial Emissions Directive focuses mainly on emissions demanding e.g., that industrial facilities use the best available technology. Emission-based requirements can be easily implemented in the legal systems of member states albeit their concrete achievement may provide challenging. The implementation of the quality-based regulations is much more challenging since they often require additional legal measures. For example, the EU Climate Law, WFD and MSFD provide quality objectives and planning frameworks, but not many concrete legal measures for the member states. Soderasp (2015), for example, uses the concept of re-nationalisation to describe the need for additional national level measures to implement the quality objectives of the WFD.

This presentation argues that the quality-based regulatory strategy is demanding for both the member states and the EU. For the member states, the strategy calls for addressing the following themes that are not exhaustively addressed in EU law:

1. Science and law interface. In order that the quality objectives are achieved at the national level, science must provide knowledge to be applied in legal decision-making. For instance, the quality of waters and the status of carbon sinks and related impacts from different sectors require constant monitoring that must be utilised in adapting the legal steering of different activities.
2. Management of combined and cumulative impacts. National laws must be coherent enough to manage the environmental impacts of different sectors and sources. For instance, the WFD is based on combined approach for point and diffuse sources, but the member states face serious challenges in controlling diffuse sources. In the same manner, the regulation of forest uses is crucial to preserve carbon sinks needed to achieve the climate change mitigation objectives.
3. Management scales. When designing national legal measures, the member states need to take the scale of environmental quality requirements into account and adopt scale-specific measures. That scale varies from local (e.g., water bodies in the WFD) to regional (e.g., marine areas in the MSFD) and national (national level climate objectives) and transnational (e.g., WFD and MSFD).
4. Versatility of legal measures. Environmental law has traditionally regulated the permitting of point source pollution. For sustainability transformation, much more versatile set of legal measures is needed from planning to e.g., corporate responsibility and collaborative governance.

For the EU, the quality-based regulatory strategy means that EU law must be coherent in regulating different sectors (e.g., environment, climate and agriculture) and that the national level measures need to be carefully monitored.

I D: Pollution / Environmental Quality

Comparison between water and air quality legal framework in the European Union: References to science and the World Health Organisation

Camille Bertaux

Université Saint-Louis - Bruxelles

Zero pollution for air and water is a 'key deliverable' for the European Green Deal. By 2050, the Green Deal and the related Towards Zero Pollution for Air, Water and Soil action plan seek to reduce pollution to levels that no longer adversely affect human and environmental health. To reach non-harmful levels of air pollution the Commission intends to revise inter alia the Ambient Air Quality and the Groundwater Directives and proposed a recast in October 2022. The revised Drinking Water Directive also provides stricter water quality standards. The Drinking Water Directive and Ambient Air Quality Proposal include significant references to the World Health Organisation (WHO) recommendations. As a matter of fact, the proposal for a recast for both directives took place at a moment concomitant with the production of new WHO guidelines. Conversely, the Groundwater Directive Proposal does not refer to WHO to establish 'consistent levels of protection for groundwater, quality standards and threshold values'.

WHO is recognised as the authority enhancing human health globally. The main activity of the organisation is devoted to the adoption of non-binding instruments, called recommendations. WHO recommendations offer technical and scientific expertise while it also seeks to guide policy and law-makers. If they are developed through a stringent process, they are not fully exempted from political considerations. Their development is also limited by scientific uncertainties as they reflect the state of science at the moment of their production. Yet, these non-binding instruments are frequently referred to during the adoption or revision of the law.

When defining the high level of health protection, the EU lawmaker sought to align with WHO quality standards. The EU lawmaker turned to WHO recommendations on Air Quality and Drinking Water Quality to establish high levels of health protection. The proposal for the recast of the Drinking Water Directive thoroughly explains how WHO recommendations were taken into consideration while the proposal for the recast of Ambient Air Quality Directives does not further discuss such references. Despite establishing water quality standards to protect human health and the environment, the Proposal for a Ground Water Directive does not refer to WHO but other agencies.

The presentation will question the notion of a reduced pollution to a level that is 'no longer considered harmful to health and natural ecosystems', one of the Green Deal's objectives, in light of the standards published by WHO and/or other relevant agencies. This notion presents particular interests especially knowing that scientific recommendations are not fixed and reflect a consensus that is naturally made to evolve. The relationship between WHO – as an authority reflecting the latest scientific information – science and the establishment of health and environmental protection standards in EU Law will be further explored as part of the presentation.

I D: Pollution Environmental Quality

From good marine environmental status to progressive restoration objectives – reflections on objectives and deadlines in contemporary environmental law

Dr. Betty Queffelec

UBO - IUEM / UMR AMURE

End of 2022, the Commission has proposed a law dedicated to nature restoration. It encompasses all kinds of ecosystems from urban to forest ones. It's article 1.2 states that « this Regulation establishes a framework within which Member States shall put in place, without delay, effective and area-based restoration measures which together shall cover, by 2030, at least 20 % of the Union's land and sea areas and, by 2050, all ecosystems in need of restoration ».

However, overall objectives with deadlines associated already apply in aquatic environments. The 2000 Water Framework Directive requires member states to achieve good status by 2027. At sea, WFD applies at sea up to 1 nautical miles from baselines. Moreover, the 2008 Marine Strategy Framework Directive requires member states to achieve good environmental status by 2020.

On the one hand, the restoration law objectives look like a regression delaying good status objectives. On the other hand, actually, good status objectives are far from being met on time. As a result, could the restoration law objectives be a solution to progressively achieve good status ? An in-depth analysis of these links between environmental legislations will allow a broader reflection about usage of objectives and deadlines in environmental law.

II A: Climate & Energy / Conceptual Issues

The Rise and Fall of a Treaty: Is an EU withdrawal from the Energy Charter Treaty in line or at odds with its ambitions to achieve a locally driven energy transition?

Daniela Muth

University of Westminster

Achieving the EU's CO₂ emissions targets under the Paris Agreement and the European Green Deal will mean considerable adjustments to our way of life as well as shifts in current market forces, particularly within the energy sector. In Europe, as elsewhere, such a transition will be impossible unless there is widespread public acceptance of the transition. It has been shown that such acceptance is most forthcoming if there is a tangible community interest. One of the pillars of current EU energy policy is therefore to encourage the development of local energy communities and provision is made accordingly in the Renewable Energy Directive.

At the same time, there is common consensus that the energy transition requires a substantial increase in investment in renewable energy which for many countries will mean some form of foreign investment. In yet, we find ourselves faced with the conundrum that the current investment treaty regime seems to be crumbling, most notably that of the Energy Charter Treaty (ECT), the only multilateral treaty that deals specifically with energy security, energy co-operation and energy investment.

Investment protection provisions are generally seen as the realm of governments and treaties and of little importance to local energy communities. Conversely, energy communities are perceived as a matter for local governance and to have little relevance to an international treaty.

The proposed paper seeks to show how the governance of energy communities at a local level and an international investment treaty, such as the ECT, at international level could be linked up to create an overarching energy governance framework that supports the energy transition, via the treaty's energy cooperation and investment protection provision. It seeks to show how the focus on recent high-profile cases of fossil fuel companies invoking investor-state dispute resolution provisions and claiming large sums of compensation against governments attempting to honour their commitments under the Paris Agreement may have obscured the ECT's potential to support an energy transition at a local level.

The proposed paper will take a fresh look at the extent to which investor-state dispute settlement provisions in a multilateral energy treaty might contribute to a legal framework that supports a just energy transition by enabling a decentralisation of energy markets towards local communities whilst also facilitating the urgently needed surge in investment towards renewable energy.

By doing so it provides a new perspective from which to judge the strengths and weaknesses of the ECT. Whilst it may be too late to modernise the Energy Charter Treaty, there is still a valuable discussion to be had about what lessons we can learn from this treaty and how these lessons can be fed into a new investment regime that is in line with the EU's climate goals - one that would enhance our energy security as well as support a locally driven energy transition.

II A: Climate & Energy / Conceptual Issues

Energy systems integration and community energy: the thermal energy communities model

Endrius Cocciolo

Universitat Rovira i Virgili

Against the backdrop strategy of the European Green Deal, the decarbonisation of heating and cooling is a significant challenge for the electricity sector, accounting for almost one-third of the European Union's energy CO₂ emissions. Fossil fuels still dominate the generation of heating and cooling, at the same time, electrification of the thermal system would impose significant pressure on the electricity grid. The energy system integration approach to decarbonisation, which includes sector coupling of cross-, inter-, and intra-sectoral energy flow and energy storage, is an attractive option to address this problem. Thermal networks such as district heating (DH) and district cooling (DC) can provide sector coupling via district energy systems that use centralised heat pumps (HP) and thermal energy storage (TES). Combining DH and DC networks into one system balanced by a centralised TES or/and energy supply unit is a promising solution that allows circular economy practices by using low-grade thermal resources and "energy trading", as heating and cooling are met by the same system, making each point of connection a prosumer. This option targets new actors in the energy system, among which energy communities (ECs) stand out. Nevertheless, the studies, particularly the legal literature, on these communities remains focused on the generation and distribution of electricity. The paper argues for the need for further research and legal analysis of thermal energy applications and the potential for coupling with the electricity grid within the frame of ECs. Such analysis will help to create more comprehensive legal frameworks to support the development of energy communities and facilitate the transformation towards a resilient and decentralised energy system. Based on the European legislative framework, the paper analyses the legal context in Spain, a country characterised by a largely unexploited urban thermal potential but with growing political and citizen interest in community-based energy solutions.

II A: Climate & Energy / Conceptual Issues

New regulatory framework for Air Pollution and Greenhouse Gas Emissions in Shipping and Aviation Sectors under the Green Deal

Jiri Vodicka

Masaryk University, Faculty of Law

The transport sector is one of the few sectors that has not yet been significantly affected by regulatory changes connected to the reduction of air-polluting substances and greenhouse gases in the EU. As opposed to ETS sectors, the emissions from the transport sector (including maritime transport, aviation, and road transport) have been experiencing steady growth over the past decade. Even though the aviation transport sector is a part of ETS, the scheme was not as successful as it should have been, and the maritime sector is wholly omitted from ETS. However, under the Green Deal, the transport sector faces reduction challenges as it has never before. For road transport, the new EURO 7 emission standards and CO₂ regulation pose a threat, aviation is to be deprived of its preferential treatment under ETS, and even maritime transport should be a part of ETS. All of these challenges are connected to the aim of the European Green Deal to make the European Union climate-neutral by 2050, and the transport sector is a crucial aspect of achieving this goal. This paper explores the current regulatory framework for air pollution and greenhouse gas emissions from maritime transport and aviation in the EU, with a focus on the legal instruments and enforcement mechanisms related to the Green Deal. The research draws on a systematic review of relevant academic literature, including primary and secondary sources such as legislation, case law, and policy papers. Through this review, the paper identifies the key features of the regulatory framework for air pollution and greenhouse gas emissions, including the role of the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO), as well as the EU's own policies and initiatives under the Green Deal. The research findings contribute to the ongoing debate on how to reduce the environmental impact of air transportation and support the EU's commitment to the European Green Deal. The main research question of this paper is: What are the key features of the current regulatory framework for air pollution and greenhouse gas emissions from maritime transport and aviation in the EU, including the relevant legal instruments and their enforcement mechanisms under the Green Deal? The paper strives to answer the research question through an analysis of relevant literature, case law, and legal instruments related to the regulatory framework for air pollution and greenhouse gas emissions from ships and planes in the EU.

II B: Biodiversity / Restoration

Toward EU Nature Restoration Law: a boost for biodiversity and climate?

Mariusz Baran

Jagiellonian University

The European Commission proposed 22 June 2022 a new nature restoration law with binding targets on pollinators, wetlands, rivers, forests, marine ecosystems, urban areas and peatlands . The new law aims to bring nature back across the continent for the benefit of biodiversity, climate and people. It can be a gamechanger if fully implemented. The legislative proposal for binding nature restoration targets presented by the European Commission can put the EU's degraded ecosystems on a path to recovery.

The Commission's proposal is a huge milestone; it is the first major piece of EU biodiversity legislation since the Habitats Directive in 1992. The proposal adds a new level of legal strength to conservation and restoration efforts across Europe. Previous attempts to increase restoration have failed, both in the EU Biodiversity Strategy to 2020 and the global strategic plan for biodiversity to 2020 .

The overarching objective of the law is to achieve continuous, long term and sustained recovery of biodiverse land and sea areas and increase climate mitigation and adaptation through restoration. Nature-based solutions should be a cornerstone of these efforts going.

The Commission set an overarching target to restore 20% of EU's land and sea area by 2030 and all ecosystems in need of restoration by 2050. Within that, 25,000 km of free-flowing rivers are to be restored and a target to reverse the decline of pollinator populations, both by 2030. The agricultural ecosystem restoration targets are also positive: increasing the share of high-diversity landscape features in agricultural land and soil organic carbon, as well as targets to increase the populations of grassland butterflies and farmland birds.

Paper will be discussed and elaborated: (i) aim of the proposed regulation, (ii) legally binding targets for Member State, (iii) no 'one-size-fits-all' concept and considered the strengths and weaknesses of proposed regulation.

II B: Biodiversity / Restoration

Bats versus wind turbines - The delicate relationship between permitting procedures and species protection

Alexandra Aragão

Legal Institute, Faculty of Law of the University of Coimbra

The ecosystem services framework is a conceptual system essential for the nature restoration. It can be used in the successive phases of the restoration process as described in the future Regulation on nature restoration:

- a) the diagnostic of restoration needs – article 4 n.4
- b) the public participation on restoration plans and measures – article 11 no. 11
- c) the restoration planning - article 11 to 15
- d) the implementation of restoration measures - article 4 to 10
- e) the monitoring – article 17
- f) the reporting – article 18

The common international classification of ecosystem services (<https://cices.eu>) is a multifaceted tool. It can be used as an effective calibration instrument to assess restoration needs; a prompt deciphering key to interpret the contribution of public participation; a clear description scheme to support planning and decision making; and a distinctive linguistic setup to communicate needs, planned restoration, mitigation and compensation measures.

Yet, in nature restoration (as in other fields where the ecosystem services framework can be used, such as in environmental impact assessment or in strategic assessment) the common classification of ecosystem services reveals intrinsic contradictions between services that require extractive activities and others that presuppose conservation activities.

In the first case, provisioning services are put forward and extraction of resources for the benefit of current generations is ranked higher. The desired result is social equity.

In the second case, the emphasis is put on the regulation and support services and conservation of natural capital is given priority. The desired result is intergenerational equity.

The major expression of this dilemma is article 9 of the restoration of agricultural ecosystems. Between intensive agrochemical monoculture production and “museum agriculture” there is a panoply of agricultural practices which can have negative positive or neutral contributions for the overall purpose of the future nature restoration law.

In this context, the cultural ecosystem services can play an important role in the selection of restoration alternatives and in the choice of the preferred option.

II C: Overarching / Liability & Crime

Evaluation of the Environmental Liability Directive

Valerie Fogleman

Stevens & Bolton LLP

The Zero Pollution Action Plan envisages an improvement in compliance by all relevant national authorities with EU pollution prevention laws. The action plan refers among other things to the Environmental Liability Directive (ELD), stating that the Commission will ‘evaluate by 2023 the ELD’s fitness for purpose, including its pollution-related aspects, and revise if necessary’. Other components of the action plan are closely linked to the ELD.

The ELD aims to avoid contamination of further sites in the EU and to contribute to halting the loss of biodiversity in the EU, as well as to improve the ecological, chemical and/or quantitative status and/or ecological potential of EU freshwaters and the good environmental status of EU marine waters. In order to achieve these aims, the ELD established ‘a framework of environmental liability based on the “polluter pays” principle to prevent and remedy environmental damage’ at a reasonable cost to society.

The framework established by the ELD requires operators that cause an imminent threat of, or actual, environmental damage to prevent or remediate the damage. The ELD has two liability systems. Operators of activities listed in annex III (including operators subject to the Industrial Emissions Directive, waste legislation, and the Seveso III Directive) are strictly liable for preventing and remedying damage to land/soil, waters under the Water Framework Directive and the Marine Strategy Framework Directive, and species and natural habitats protected by the Birds and Habitats Directive (biodiversity damage). Non-annex III operators are liable for preventing and remediating biodiversity damage if the damage is caused by their negligence. The ELD includes numerous options, exceptions and defences.

A major innovation in the ELD for environmental law in the EU is its imposition of complementary remediation if primary remediation does not return damaged waters or biodiversity to their baseline condition, as well as compensatory remediation for the interim loss of the waters or biodiversity to other natural resources and the public. No national non-ELD legislation imposes such liability.

The ELD has helped avoid some environmental damage caused by pollution and other causes. Its implementation by a substantial number of Member States however has not been effective. Despite its adoption by the EU in 2004, some Member States have still not recorded a single ELD occurrence. The number of ELD occurrences in many other Member States is low or very low. Even when competent authorities have enforced national ELD legislation, they have rarely required liable operators to carry out complementary and compensatory remediation. Many reasons exist for the ineffective implementation, both in the architecture of the ELD and the interpretation of key provisions in it by Member States and competent authorities.

This presentation will examine and analyse the ELD and its implementation.

II C: Overarching / Liability & Crime

Examining Corporate Ecocide in the European Union with a focus on France & Germany

Mrinalini Shinde

University of Cologne

In 2008, the EU enacted Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law (hereinafter referred to as the 'Directive'). Germany transposed the Directive into national law while France required no further transposition. While Article 3 of the Directive lists the different environment criminal offences, the text contains no explicit mention of ecocide, but there is similarity between ecocide and the offences under the Directive. For example, the Directive contains the term "substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants" to describe the impacts of the environmental crime offences. The proposed definition of ecocide by the expert panel constituted by Stop Ecocide International (to amend the Rome Statute of the ICC to include the crime of ecocide) defines ecocide "unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts."

In 2021, the proposal was put forth to replace the Directive with new text. The new text under ¶16, includes the following text: "...when an environmental criminal offence causes substantial and irreversible or long-lasting damage to an entire ecosystem, this should be an aggravating circumstance because of its severity, including in cases comparable to ecocide." The European Law Institute recently released a draft report proposing a new EU directive "on establishing minimum rules for the crime of ecocide" which provides a detailed definition of ecocide, intent and penalties, including for legal and natural persons. The Rome Statute, on the other hand contains no specific penal provisions against legal persons, and only considers individual criminal responsibility of natural persons.

In light of these legal developments regarding ecocide, this paper synthesises how the two European jurisdictions of Germany and France address environmental crime, especially "substantial damage" to the environment in domestic law, while transposing EU and international law, and how the two jurisdictions have decided in their judgments in this matter, particularly after the 26.12.2010 transposition deadline of the Directive. The paper aims to understand how different or similar the impact in France or Germany would be if the two proposed Directives were to be enacted, especially in the context of corporate criminal liability for ecocide, given that the French criminal code recognises the criminal liability of legal persons, and German criminal law only recognises individual criminal responsibility in criminal offences.

i. Stop Ecocide International, Independent Expert Panel for the Legal Definition of Ecocide, <https://static1.squarespace.com/static/5ca2608ab914493c64ef1f6d/t/60d7479cf8e7e5461534dd07/1624721314430/SE+Foundation+Commentary+and+core+text+revised+%281%29.pdf> (last accessed on 13.12.2021).

ii. European Law Institute, Model Rules for a EU Directive and a Council Decision Draft as of 19 January 2023 (Council Draft).

II C: Overarching / Liability & Crime

The impact of the Proposal for a revised Eco-Crime Directive on the fight against plastic waste trafficking

Maria Marques-Banque

Universitat Rovira i Virgili

This paper aims to assess the impact of the Proposal for a Directive of the European Parliament and of the Council on the protection of the environment through criminal law and replacing Directive 2008/99/EC in the fight against plastic waste trafficking.

As stated by the European Commission, the proposal for a revised Eco-Crime Directive is part of the broader package of initiatives under the European Green Deal: “By improving how Member States address the most severe environmental offences, the proposal aims to contribute to the Green Deal's overall goals of tackling the climate crisis, environmental degradation, pollution and loss of nature”.

According to INTERPOL, the illegal plastic waste trade has increased since China banned waste imports in 2017, becoming a major environmental crime that causes serious harm to the environment and human health.

The Directive 2008/99/EC imposes on Member States the obligation to punish with effective, proportionate and dissuasive criminal sanctions a series of conducts when they are "unlawful". These behaviours include two crimes related to the management and shipment of waste.

The proposal for a revised Eco-Crime Directive modifies the conduct related to waste management but maintains the wording of the waste shipment offence. Despite this, the proposal still directly influences the prosecution of illegal plastic waste trade. On the one hand, the crime related to waste management includes conducts linked to acts of the complex chain that make up the phenomenon of waste trafficking. On the other hand, the proposal sets the obligation for Member States to provide for maximum penalties of at least six years' imprisonment. Although the issue of the seriousness of the penalties is usually considered at the international level to apply the United Nations Convention against Transnational Organized Crime (UNTOC), most of the instruments adopted within the framework of the Area of Freedom, Security and Justice to facilitate cooperation in criminal matters in the EU, also condition the applicability to minimum requirements of the seriousness of the crimes.

Beyond the specific waste offences, the proposal for a revised Eco-Crime Directive is also relevant because of its more comprehensive approach to tackling environmental crime. The paper will analyse all the measures included in the proposal that can significantly impact the fight against plastic waste trafficking.

II D: Seminal issues - Air / Science / Public

Access to effective remedies in the revision of the AQFD

Morgan Eleanor Harris

Università degli Studi Roma Tre

The EU's zero pollution target, and the recently proposed revisions to the Air Quality Framework Directive, aim to update air quality standards and governance to reflect the growing scientific consensus about the impact of poor air quality on human health. Not only does the proposal set new limits, it also institutes a new form of redress for groups harmed by poor air quality in the form of a representative action, allowing NGOs to seek compensation on behalf of affected communities. This remedy may help fill the gap left by the recent decision of the CJEU in *Ministre de la Transition écologique and Premier ministre (Responsabilité de l'État pour la pollution de l'air)* (C-61/21), which ruled out state liability for individuals whose fundamental rights have been harmed by unhealthy air. However, poor air quality affects certain communities more than others, communities that are often already facing marginalization. How do the legal remedies available under EU air quality directives address this environmental inequality? Could the new remedies offer more effective remedies for individuals and groups in vulnerable situations?

The proposed remedy deserves careful analysis within the context of remedies already available under EU and national law to enforce EU air quality rules, including challenges against inadequate air quality planning (C-237/07) or permits for certain installations (C-375/21) or, where available, individual actions for damages against the state (C-61/21).

To better illustrate the issues at stake, the analysis will focus on one legal context: the city of Rome. First, we can identify potential barriers to accessing existing air quality remedies faced by communities in vulnerable situations harmed by poor air quality, such as lack of access to court or to scientific expertise, economic barriers, social and cultural barriers. Then, the proposed remedy may be examined to see how it, within the broader context of EU law, may facilitate groups in overcoming these barriers, such as by instituting collective redress, applying presumptions of causality, and setting limits on costs. Last, it can be seen whether the proposal may effectively make good the harm suffered or prevent future harms. This analysis can offer insight into how the proposal could expand the protection of rights of communities, but also point to areas where inadequate implementation of existing rules (i.e. limited possibilities to challenge air quality plans, prohibitively expensive costs) needs to be addressed.

If remedies to address poor air quality are not carefully designed to overcome barriers faced by marginalized groups, there is a risk that they worsen existing inequalities, transferring public resources away from those communities where they are most needed. Careful analysis of the system of remedies in the light of public participation rights and fundamental rights, including Article 47 CFR, can help us to anticipate and avoid this risk.

II D: Seminal issues - Air / Science / Public

The revision of the Ambient Air Quality Directive: what role for public participation?

Justine Richelle

Hasselt University & Maastricht University

When publishing the European Green Deal in December 2019, the European Commission expressed its ambition for a toxic-free environment. One of the key elements to reach that goal is the Commission's Communication on an EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil', released in May 2021. This plan foresaw the revision of several pieces of legislation, including the Ambient Air Quality Directive (Directive 2008/50, the 'AAQD').

As stated in its Preamble, the AAQD is the main instrument to regulate air quality by combating emissions of pollutants, in order to protect human health and the environment. For this purpose, the AAQD provides for various measures, including the elaboration of air quality plans and short-term action plans.

On the one hand, the drafting of air quality plans under Article 23 of the Directive is subject to the rules laid down in Directive 2003/35/EC, known as the Public Participation Directive. The Public Participation Directive transposes the Aarhus Convention, an international instrument codifying procedural rights in environmental decision-making. Accordingly, the public concerned must be able to participate in the drafting of air quality plans.

On the other hand, Article 24 of the current version of the AAQD, which relates to the procedure to adopt short-term action plans in case of risk of exceedance of alert thresholds, does not mention public participation, which raises the question of compliance with the Aarhus Convention.

The proposal for a revision of the AAQD was presented by the Commission on 26 October 2022. The proposal adapts the definition of short-term action plans so as to add public participation requirements to the drafting of such plans. The proposed modification hence aims to enable the public to have a role in environmental decision-making procedures even in such emergency times.

The proposed revision, if adopted by the Council and approved by the European Parliament, will imply that Member States are mandated to consult the public prior to the finalisation of short-term action plans. This novelty will certainly have an impact on the environmental decision-making processes of Member States, as it will touch upon modalities to consult the public in case of emergency decisions.

The objective of this submission is to discuss the suggested obligation to include public participation into the decision-making of short-term action plans, and the legal uncertainties surrounding this proposal.

The following structure applies: firstly, it provides an overview of the role of public participation in EU air quality legislation, specifically concerning the revision proposal of the AAQD. Secondly, it will discuss the problem of how to provide public participation in emergency procedures, such as the drafting of short-term action plans, addressing questions such as 'how much public participation suffices in times of emergency?', and 'does the Aarhus Convention provide guidance in this respect?'. Thirdly, this contribution will take a more practical angle by discussing how the procedure of drawing up short-term action plans has been arranged in France, and what modifications the proposal of the AAQD would call for.

II D: Seminal issuesd - Air / Science / Public

Ensuring the role of environmental defenders as ‘compliance watchdog’ in achieving the European Green Deal: tackling digital intimidation against environmental defenders under the Aarhus Convention

Lien Stolle

Ghent University

In light of the European Green Deal, implementation and enforcement of EU environmental legislation by member states and EU institutions is vital – as is the EU’s compliance with its international obligations, including the UNECE Aarhus Convention (AC). The European Commission repeatedly stressed the importance of civil society as a ‘compliance watchdog’ in the democratic space to achieve the societal transition envisaged by the Green Deal (European Commission, COM(2020)643, COM(2020)380). While the main focus is on improving access to justice (European Commission COM(2019)640, COM(2020)643), strengthening the entire set of principles of the Aarhus Convention is of great importance to the Green Deal. To ensure compliance in practice, strong enforcement mechanisms are needed that allows civil society to hold the EU institutions accountable when they fail to meet their environmental obligations. Moreover, the implementation of the Green Deal itself may encounter resistance. This resistance may take the form of intimidation against those speaking out and taking action for a social transition – potentially silencing civil society. This is where Article 3(8) of the Aarhus Convention (which protects environmental defenders from penalization, prosecution and harassment) and the recently introduced Special Rapporteur on Environmental Defenders (MOP Decision VII/9, 2021) comes in.

The presentation will focus specifically on a form of harassment that is of increasing concern and is often less visible and tangible – namely, online and technology-facilitated forms of harassment or ‘digital intimidation’ (Lloro 2018; Poetranto et al. 2020; Eklöv and Francisco Alvarado Cobar 2021). Digital technologies are increasingly important for environmental defenders, both as a tool that facilitate speaking and/or campaigning, but also because of the (digital) risks (e.g. online threats) one may face through their involvement. Currently, few research exists on digital intimidation against environmental defenders in particular. Leaving this issue unaddressed perpetuate a lack of awareness about the risks and challenges that environmental defenders may face in terms of online safety and digital intimidation, which may ultimately curtail the public debate on environmental issues and may remove them as ‘compliance watchdogs’ from the debate. As aforementioned, ‘compliance watchdogs’ are of great importance for the realisation of the Green Deal. The Aarhus Convention can thus play an important role here. Ensuring protection against digital intimidation safeguards environmental defenders’ fundamental rights such as freedom of expression - which is necessary in a democratic society.

First, however, an understanding of the scope of Article 3(8) AC and its application to digital intimidation is necessary. Therefore, this presentation will focus on (a) the phenomenon of digital intimidation against environmental defenders, and (b) the role of Article 3(8) AC and the Special Rapporteur in addressing such form of intimidation. This presentation builds on a paper I authored, currently under review, which looks at the application of Article 3(8) to digital intimidation based on the decisions of the Aarhus Convention Compliance Committee and the mandate given to the Special Rapporteur. The analysis shows that there is potential for protection against digital intimidation under Article 3(8) AC, but more explicit attention and awareness is needed.

III A: Climate & Energy / Renewables

Developments and Trends in Supporting Renewable Energy Sources in the EU

Theodoros Iliopoulos

FWO - Flanders Research Foundation, Hasselt University, Ghent University

In late 2019 the 'European Green Deal' (EGD) expressed the vision and plan for a paradigm shift that impacts on many different aspects of environmental, energy and climate law. Nevertheless, the smooth implementation of the EGD has been challenged, first, by the outbreak of the COVID-19 pandemic and, second, by the Russian invasion of Ukraine. Focusing on the field of energy, the energy transition plan has been stalled, and the relevant challenges have been exacerbated, as the coincidence of the two abovementioned major events has given rise to an unprecedented energy security crisis.

The Commission's response to the energy crisis, namely the REPowerEU action plan, has emphasised that we need to 'fast forward' the clean energy transition and the phaseout of Europe's dependence on (fossil fuel) imports. But the supportive market interventions that will deliver a rapid development of renewable energy sources (RES) should not further aggravate the energy price crisis that Europe is experiencing.

The design and implementation of such supportive policies is the point of focus of this contribution.

It is noted that, in the recent months, classic support schemes and policies struggle to balance the criticism of being ineffective and slow in bringing a fast increase in (renewable) energy production, on the one hand, and of being overly costly to the detriment of the energy consumers, on the other. Dealing with this reality, national authorities are more and more turning to support policies that have the potential to be more 'market-oriented', such as competitive bidding, contracts for difference, power purchase agreements and self-consumption schemes. In addition, it is noted that while the allocation of support has always been at the epicentre of the EU legal order's interest, after the REPowerEU Plan, attention is shifting towards the simplification of the necessary administrative procedures (e.g. for permits or grid connection), which, however, can prove challenging for environmental protection and biodiversity.

Within the framework of the above, this contribution will give a critical overview of the developments and trends in the field of support policies for RES. It will investigate the role of the EU legal order (including considerations of competences and harmonisation) in the design, enactment and implementation of support policies for RES, and will propose recommendations for the future development of the field.

It is noted that the legal and regulatory framework that governs support to RES is (still) a mosaic, and therefore hard law (mostly the Renewable Energy Directive 2018/2001, which is expected to be revised in the course of 2023), soft law (Guidelines on State Aid for Climate, Environmental Protection and Energy), and policy documents and 'strategies', are all relevant to this contribution.

III A: Climate & Energy / Renewables

Winding paths of RED implementation relating to wind power - the case of Poland.

Anna Brzezińska-Rawa¹; Justyna Goździewicz-Biechońska²

¹ Nicolaus Copernicus University in Toruń, Poland; ² Adam Mickiewicz University in Poznań, Poland

Renewable energy is at the heart of the clean energy transition, a key pillar of the European Green Deal. The main legislative instrument in this regard is the Renewable Energy Directive (RED). The EU's approach relies on the Member States' potential and individual specificity for the cost-efficient deployment of renewable energy to achieve energy and climate collective targets. Although implementation is vital to ensure EU policy work, it remains the 'Achilles heel' of the EU policy process. The study aims to identify the main actors and processes that affect policy implementation. It is analyzed on the example of the Polish implementation of RED in the context of wind power.

Wind power is still the most developed among RES in Poland, where wind farms produce 70% of renewable energy and 16% of the energy from all sources. However, at the same time, wind energy is one of the most controversial. Besides the common barriers related to all types of renewable energy projects, there are also specific problems especially connected with conflicting public goods and protracted opposition. These issues are further entangled in the political context, which makes the issue of wind energy very complex. That results in political agenda setting, particular policy patterns and legislative choices that facilitate specific goals and values, usually of political nature. The study presents this agenda-setting dynamics and its influence on the legislative instruments to implement RED. Both onshore and offshore wind energy developments will be taken into consideration.

The prospects for wind energy development in Poland were initially good, and the overall public perception was favourable. For example, in 2008, Poland was a leader in new installed capacity among the new EU Member States. However, in 2016, the wind energy sector entered a stagnation phase, and the total suspension of wind energy development resulted from the Act on Wind Farms Developments. It introduced stringent criteria for keeping distance from residential buildings. As a result, 99% of the territory did not meet the statutory criteria. The amendment of this act was one of the milestones according to Poland's National Recovery Plan. Currently, after a lengthy public discourse and legislative process, the new amendment was adopted on 8 February 2023. Despite hopes, this amendment to the law did not unlock the possibility of wind farm development.

The Offshore Renewable Energy Strategy sets the goal of 300 GW of offshore wind energy in the EU by 2050. It should then be implemented in the regularly updated national energy and climate plans pursuant to Regulation (EU) 2018/1999. Currently, there are no offshore wind installations in Poland. Individual permits must be obtained through a specific procedure, which is lengthy. More than 20 location permits were issued, but only a few have a chance of implementation, as most have expired. In 2020, the special offshore wind energy act was enacted to facilitate and simplify procedures.

III A: Climate & Energy / Renewables

The role of long-term contracting in promoting renewables according to the Commission's new proposals on electricity market design and how it will play out in Italy.

Beatrice Bichi Ruspoli

Università degli Studi di Roma Tre

On 14 March 2023 the Commission published a proposal to improve EU's electricity market design in the framework of the New Green Deal. Among other measures, the Commission plans to amend Regulation (EU) 2019/943 (the "Electricity Regulation"), by including new rules to clarify and incentivize the role of long-term contracting. Will this proposal help Italy boost renewable energy production to meet the decarbonisation targets laid down in Regulation (EU) 2021/1119 ("European Climate Law")?

Indeed, according to the latest statistics, in Italy the share of energy consumption covered by renewables in 2021 was far below expectations (around 19.03%). Therefore, in the path towards decarbonisation, Italy's consumption of renewable energy really needs to improve significantly to meet the binding target of 32% by 2030 set by Directive (UE) 2018/2001 (the "RED II Directive"), which the REPowerEU Plan wishes to increase to 45%.

In the proposal at hand the Commission outlines its strategy to incentivise renewables by favouring long-term fixed-price contracts between private parties, the so-called power purchase agreements or "PPAs". This type of contracts supports producers by guaranteeing stable revenue lines and, at the same time, benefits consumers by protecting them from price spikes. As an alternative, the Commission recommends long-term contracting with public counterparts in the form of two-way contracts for difference (or "CfD"), placing a minimum and a maximum limit on energy remuneration. However, public support schemes should never exclude private investments, especially since direct benefits for consumers are more limited.

So far, Italy has mostly used public incentives awarded through competitive procedures to support the development of renewable energy plants. The incentives are delivered alternatively in the form of an overall feed-in tariff or a CfD, depending on the power capacity of the plants. Italy is also developing a platform to promote PPAs, but this type of contracts is struggling to take off. Among the elements hindering its diffusion are the high degree of regulatory uncertainty and the buyers' difficulties to find credit guarantees in the long term, which make them accessible only to large industrial end-users.

In conclusion, the development of a market for PPAs, if matched with other equally important measures, such as investments in the electricity grid and optimisation of authorisation processes for new plants, could really boost renewable energy production and consumption in Italy in future years. Indeed, the new regulation could increase the demand of renewable energy in Italy and secure more stable long-term sources of revenue for plant developers. However, pricing methods must be determined in such a way as to still provide the right price signals to end users and maintain a sufficient degree of competitive pressure between suppliers. Finally, to really exploit the Commission's proposal, Italy needs to overcome the obstacles that have prevented the development of the PPA market so far and make this type of contracts more accessible to consumers, for e.g. by providing for guarantee schemes at market prices and standardisation of contracts and by favouring aggregation between small consumers.

III A: Climate & Energy / Renewables

Energy transition strategies at subcentral level: the case of Catalan public energy company

Jordi Jaria-Manzano

Universitat Rovira i Virgili

In the context of the reaction of the global society to the planetary transformation, the need for an energy transition takes on a prominent role, as far as all social and economic activity ultimately depends on the current energy model. This model is largely determined by public action, be it through production and distribution, be it through regulation, or also through promotion. The European Union has populated the regulatory space of energy sector with comprehensive regulation, followed by transpositions of member states, as is the case of the amendments of the Energy Sector Act. Consequently, as far as states have already little room to maneuver, subcentral entities in decentralized systems confront themselves to significant limitations regarding the pursuit of a singular energy policy.

In the case of Spain, energy has been one of the fields where the process of recentralization started with the 2008 global financial crisis has been more notorious. However, at the same time that the EU and the Spanish state pass detailed regulation regarding the energy transition, there is some consensus about the need of having local communities on board to guarantee the success regarding such a complex and multifaceted societal challenge. In this context, questions raise about the role of autonomous communities, the subcentral units in the Spanish decentralized system, regarding energy transition. In the last years, the Spanish Constitutional Court has made clear that there is little margin for regulation, particularly in its judgment on the Catalan Climate Change Act. Thus, it seems that autonomous communities must seek a certain space of intervention in other aspects of energy policy.

Exploring this in principle reduced space of self-government regarding energy transition and trying to build a consistent strategy in committing the citizenship, Catalan Government has recently approve the formation of a public energy company. It should impulse the deployment of energy communities, and channel the Next Generation Program resources to fund projects related to energy transition, as well as it is active in the production and trading of energy. Incorporated in October 2022, the Catalan public energy company can show some strategies of action for subcentral powers, as well as the limitations of regional energy policies in the EU. Particularly significant it will be the role of the public company in exploring strategies to prompt the deployment of energy communities and enhancing the use of renewable energies.

III B: Biodiversity / Restoration

Nature as an overriding public interest? Restoration hierarchy as a lens to operationalize EU nature restoration targets

Niko Soininen; Suvi-Tuuli Puharinen

University of Eastern Finland

One of the cornerstones of the EU Green Deal is the commitment to protect and restore nature. To implement this, the EU has established an ambitious Biodiversity Strategy and proposed a regulation for nature restoration. The proposal sets multiple binding restoration targets and obligations across a broad range of ecosystems. These policy instruments recognise that we are waking up to the biodiversity crisis so late in the game that mitigating biodiversity loss is no longer sufficient. There is a need for active measures that question past and existing land and natural resource activities. Nowhere is this more visible than in the context of restoring 25.000 km of river continuity, and re-evaluating existing hydropower dams across the EU.

Despite strong policy and legal aspirations to restore nature, the implementation of such goals in the EU member states – considering the short timeframes – will need to take place in the existing institutional and legal structures that have brought us in this predicament. We argue that there are several fundamental legal-institutional biases that stand in the way or considerably impede the implementation of the restoration targets. First, the default setting in legal systems is that natural resource use is always allowed unless specifically forbidden (e.g., protected areas), and only requires mitigation of harm caused by an activity to biodiversity without questioning the right to pursue the activity as such. Second, once granted natural resource use authorizations typically enjoy a level of permanence, while the nature's right of non-use is typically not recognized. Third, legal systems contain strong measures, like expropriation, for driving projects that are deemed vital for the public interests, but those measures are more readily applicable to infrastructure and energy, rather than restoring habitats. Fourth, a major challenge in implementing the calls for nature restoration is that we currently lack the concepts and tools to do so at landscape scale; restoration activities are typically conducted at project scale.

After mapping the legal biases, we move on to present restoration hierarchy as a novel concept and tool through which to rethink and recalibrate the current legal setting to deliver on the restoration targets. The restoration hierarchy is based on ecological foundations for what is needed to bring back nature at scale and it seeks to elevate nature as an overriding public interest, which is needed to effectively operationalise restoration in legal systems. More concretely, we show how the existing legal obligation can be retrofitted to the restoration hierarchy. This illustrates the potential the tool has in identifying legal drivers, obstacles, and enablers for restoration at the level of EU law. To make our argument clear and tangible, we use the damming of rivers for hydropower as an example. While we recognise that freshwaters are only one part of nature, it is a part that has taken particularly significant hits due to damming of rivers for hydropower and other purposes. Such a clear causal link between a particular human activity and biodiversity loss offers us a clear example for making our argument.

III B: Biodiversity / Restoration

Fifty Shades of Restoration in Italy

Eleonora Ciscato¹; Francesca Leucci²

¹ University of Milan; ² University of Bologna, Rotterdam and Hamburg

Environmental policies traditionally directed to nature conservation and prevention of damage turned out to be insufficient. Indeed, according to the Secretariat of the Convention on Biological Diversity (2020), none of the 20 Aichi Biodiversity Targets has been fully achieved at the global level. Against this backdrop, restoration actions have been increasingly attracting international and national efforts, with 2021-2030 declared as the UN Decade on Ecosystem Restoration. Moreover, in 2022 the EU Commission put forward a proposal for Nature Restoration Law in view of halting further degradation of habitats and species. Notwithstanding the explosion of restoration initiatives following these political calls for action, projects and programmes turned out to be often insufficient and uncoordinated. Major barriers are to be found in socio-economic factors, rather than environmental (Cortina-Segarra et al., 2021).

Therefore, the aim of this paper is to identify norms and institutions that are likely to facilitate or hinder the achievement of full ecological restoration, drawing on Italy as a case study. In view of that, we analysed national legal tools setting down obligations to restore upon private and public parties, ranging from conservation laws to remediation after damage, environmental impact offsetting and industry-specific regulations. The Society of Ecological Restoration (hereinafter, SER) defines “ecological restoration” as one of the activities that can be implemented to support the recovery of ecosystems and they can “be conceived of as a continuum”. This analysis wants to cross SER definitions of “restorative activities” (in all of their shades and implications) with national classifications of restoration laws. This exercise is functional in reconstructing an easy-to-read yet comprehensive scheme of areas of environmental law that, drawing on specific legal terms, pursue more or less compulsory restoration targets making it apparent those areas that are still lagging behind.

Based on a preliminary review of Italian environmental laws and mandates, the Italian legal landscape seems to be highly scattered and characterised by a plethora of terms referring to restoration (for example: rigenerazione, rivegetazione, recupero, bonifica, risanamento, ripristino, riparazione, ricostituzione and others).

Clearly, the diversity of wording whose content is not explicated in the law, risks to undermine the achievement of EU policy goals. However, even when the law mentions ecological restoration, we witness inconsistencies between norms and practice. Moreover, in the aftermath of the EU Green Deal, new legal tools have been introduced setting down additional obligations to restore, whose effect on previous restoration obligations is to be determined.

As a consequence of this heterogeneous legal framework, pursuing ecological restoration is uncertain. In this paper, we provide an updated overview of the Italian legislation in view of implementing the EU Green Deal.

III B: Biodiversity / Restoration

Enforcing the European Green Deal in the context of ecological restoration: what opportunities for strategic litigation?

Floor Fleurke¹; Hendrik Schoukens²

¹ Tilburg Law School; ² Gent University

The ambition level of the (proposed) legislation to implement the European Green Deal (EGD) is notably ambitious. For example, the proposed EU Nature Restoration Law aims to introduce area-based restoration measures for at least 20% of the EU's land and sea area by 2030, and all ecosystems in need of restoration by 2050. Yet, it is well understood that previous legislation with a focus on restoration has not met satisfactory levels of implementation. Therefore, a focus on private enforcement through (strategic) litigation by environmental NGOs might be a necessary lever to put additional pressure on the national authorities. By taking the proposed EU Nature Restoration Law and other EGD legislative acts centerpiece and building on the existing case law of the European Court of Justice, this paper identifies the potential obstacles and opportunities for enforcing restoration targets through court room actions. Amongst other things, elements such as the applicable baseline, trias politica and standing are addressed.

III B: Overarching / Liability & Crime

BIODIVERSITY AND LIABILITY IN THE EU: A LAW AND ECONOMICS PERSPECTIVE ON RESTORATION

Francesca Leucci

University of Bologna, Rotterdam and Hamburg

Environmental accidents continue to happen around the world showing both the ineffectiveness and the inefficiency of regulatory and liability instruments introduced to tackle accidental harm to ecosystems and biodiversity. While standards and regulations aim at directly shaping behaviours independently from the occurrence of harm, tort liability works in an indirect way through the deterrent effect of damage actions.

The mechanism of prevention can be summarised as it follows. If a polluting firm knows that it will be ex post liable for the damage caused by its polluting activity, it is induced to take ex ante optimal care. In other words, through the threat of liability laws firms (should) invest in care up to the point where the marginal cost of abatement is equal to the marginal damage that will be imposed to the society tomorrow (K. Mäler and J. Vincent, 2003). In this way, liability laws pursue deterrence through the internalisation of externalities (Endres, 2011). The legal translation of this economic principle is represented by the “polluter-pays” principle.

Multiple issues might hinder the efficient mechanism of liability (i.e. the uncertain causality link). However, one of the most overlooked points is the methodology to assess the value of biodiversity that has been lost. With this paper I wish therefore to offer a less common approach to the prevention of biodiversity impacts in the EU by resorting to the theory of law and economics. This perspective helps indeed to understand how the law can affect the behaviour of potential polluters and incentivise them to adopt optimal levels of care and activity. More specifically, the aim of this contribution is to unveil the behavioural effect of the Directive 2004/35/CE (Environmental Liability Directive, hereinafter ELD) by means of a positive economic analysis of its provisions on damage assessment and remedies.

The afore mentioned research question will be tackled through three subsequent steps. First, the economic theory of liability will be illustrated. Secondly, the main provisions of the ELD on restoration will be summarised. Thirdly, their incentive effects on potential polluters will be thoroughly investigated with a case-based approach and a focus on the main issues of inefficiency.

Some preliminary findings suggest that restoration as a primary remedy at the EU level cannot work to optimally deter polluters from harming biodiversity due to information asymmetries and unclear guidelines about the baseline or the equivalency between restored ecosystems and damaged ones. Moreover, the mere costs of clean-up might not be enough to cover the more complex value of biodiversity due to conflicting interests of those in charge of clean-up measures.

To conclude, a normative proposal would be to provide the judiciary with clear and harmonised guidelines on the assessment of biodiversity values and the assessment of restoration options. That would improve both the efficiency and the effectiveness of the ELD throughout the EU.

III C: Pollution / Soil and Agriculture

The combat of nitrogen deposition in Natura 2000, in light of the legal nature of conservation objectives and nature restoration targets. Can soft-law be hard (to endure) ?

Geert Van Hoorick

Ghent University

On 25th February 2021 the administrative judge in the Flemish Region (Belgium) annulled a decision of the (former) minister to grant a permit for a large chicken farm nearby a special conservation area (Natura 2000). The reason for the annulment was that no 'appropriate assessment' according to article 6(3) of the Habitats Directive had been conducted. The absence of an appropriate assessment was due to the fact that the additional ammonia emissions stayed below a threshold of 5 % and below that threshold, according to the PAS (a programmatic nitrogen policy plan), no appropriate assessment had to be made. A similar case in the Netherlands led to a judgment of 7th November 2018 of the Court of Justice of the EU, and an annulment of the Dutch plan by the Council of State. In May 2021 the Flemish minister has responded by issuing a temporal ministerial instruction that thresholds may no longer be applied in relation to ammonia, but that a threshold of 1 % is still acceptable for nitrogen oxide. In February 2023 after huge disagreements the Flemish Government finally adopted a new policy plan, with still a threshold of 1 % for nitrogen oxide, and a threshold of 0,025 % for ammonia.

This judgment, other and the Government responses are an item in the media, and there has been large demonstrations of farmers. The Government responses are not only meant to examine closer the nitrogen deposition of agricultural enterprises but also to facilitate economic growth (of industry, construction). Similar developments are taking place in the Netherlands, where at the moment (April 2023) a new kind of farmers political party has had an electoral victory and has brought Dutch Government in an impasse.

In this contribution I want to discuss the (new) nitrogen deposition policy in relation to the conservation objectives and targets based on article 6.1 Habitats Directive and the Biodiversity Strategy, and the targets of the proposed EU Nature Restoration Law. Is the (now) strong action of Flemish Government towards agriculture legally justified ? In how far are the targets to combat nitrogen deposition legally binding for the Member States ? How much room is there for the application of thresholds to reduce legal uncertainty without compromising the goals of Natura 2000 ? Does nature restoration in or nearby Natura 2000 imply to take measures to get rid of the most polluting agricultural enterprises ? Is there legal room (in light of the principle of equality) for different thresholds for nitrogen oxide and ammonia ?

III C: Pollution / Soil and Agriculture

Sustainable agriculture through biological control - A natural science and law perspective

Negar Ghezel Sefloo; Maria Bertel

University of Graz

The world's population is expected to increase dramatically in the next 30 years. Due to rapid population growth, the demand for food will increase significantly. However, it will be difficult to meet this challenge as pests drastically reduce crop yield and quality. Thus, plant protection products (PPPs) are essential for a well-functioning food production system.

For a long time, plant protection has mainly relied on chemical pesticides. Although chemical pesticides are effective in controlling pests and improving crop quality and yields, their long-term and extensive use has hazardous effects on human health and the environment. Therefore, alternatives to chemical pesticides are crucial to ensure a sustainable food production, while at the same time the environment and human health are protected.

A particularly promising alternative to the use of chemical pesticides is the biological control of plant pests and pathogens. This is also reflected by the EU Green Deal, which emphasizes the use of biological control agents (BCAs) in its Farm to Fork Strategy as an environmentally friendly alternative that holds great promise for pest control in sustainable food production.

However, the use of BCAs still encounters many limitations and challenges, not least because the regulatory framework for BCAs at EU and national level tends to hinder rather than encourage their progress and development. Nevertheless, the issue of sustainable use of PPPs is crucial and cannot be neglected in the midst of a climate crisis. Moreover, there are recent initiatives and legal acts on the EU regulatory framework of BCAs and national norms on BCAs in many Member States that raise many questions from both a legal and natural science perspective.

Therefore, interdisciplinary research is necessary encompassing not only at a comparative analysis of the risks and benefits of BCAs from a natural science perspective, but also at a comprehensive critical analysis of the regulatory framework for BCAs from a legal perspective. This prospect is particularly important to develop proposals for necessary regulatory changes that will facilitate the exploitation of the full potential of BCAs for sustainable food production while minimizing the risks associated with their use.

III C: Pollution / Soil and Agriculture

Curing unhealthy soils: Is phytoremediation the medicine?

Marko Perisic

Hasselt University

As a consequence of anthropogenic activity, soil contamination constitutes a major environmental threat to human and animal health. Its effects make soil incapable of fulfilling its functions, such as food production. Unresolved problems with unhealthy and unusable soils demand action for sustainable soil management. Against this backdrop, nature-based techniques for soil remediation are a viable solution to enhance soil biodiversity and foster soil ecosystem services by strengthening its resilience. Phytoremediation is an ecologically sound technique with the potential to resolve various environmental issues by converting contaminated land into arable. At the same time, phytoremediation as a plant-based approach represents an alternative to unsustainable and expensive conventional remediation techniques that fall short of mitigating climate change. Another important aspect favouring phytoremediation with regard to traditional remediation is social acceptance of its aesthetic attractiveness.

However, besides the benefits that characterise phytoremediation strategy, per se, it is not without risks. Successfully undertaking phytoremediation techniques requires advanced agricultural knowledge and inevitably opens the question of selecting the most appropriate plants or crops to combat soil pollution. That kind of decision often concerns the special category of plants, i.e., invasive alien species that fall under legislation limitations.

The European Green Deal brings ambition to make Europe a climate-neutral continent by 2050. On that path, soil represents a critical element. Additionally, it is no secret that global demand for agricultural commodities is increasing, followed by a constant rise in the amount of land devoted to agriculture. A long-term battle would require legal scholars to follow scientific developments in order to find the most suitable green solutions to reach good climate and environmental results. One of them may be a phytoremediation strategy that bridges the gap between biodiversity losses and land uses generated by human activities such as agriculture. This research aims to examine to what extent phytoremediation could fit in the objectives set in the new policies of the EU additionally to contribute toward its achievement, with special attention to Soil Strategy for 2030, the Biodiversity Strategy for 2030 and the Farm to Fork Strategy.

III C: Pollution / Soil and Agriculture

One step closer to zero chemical pollution: the legal implementation and implication of the PFAS restriction proposal

Viktoria Obolevich; Kateřina Mitkidis

Aarhus University

On 13 January 2023 Denmark, Germany, the Netherlands, Norway and Sweden have submitted a dossier to the European Chemicals Agency (ECHA) proposing new restrictions aimed at significantly reducing the introduction of per- and polyfluoroalkyl substances (PFAS) into the environment.

Phase-out PFAS in the European Union (EU) is one of the key actions of the Chemicals Strategy for Sustainability towards the EU's zero pollution target – a key commitment of the European Green Deal.

The dossier has been prepared within the framework of the REACH Regulation on chemical substances (REACH) - the cornerstone of EU chemicals legislation. It proposes to restrict more than 10,000 PFA, and claims to be one of the most comprehensive ban in the EU's chemical history.

PFAS – also known as 'forever chemicals' – are a group of chemical substances that serve a wide range of customer needs. They are famous for their high persistence in the environment, degradation resistance, high accumulation potential (in water, animals, plants and human bodies), mobility and long distances transportability, global warming and (eco)toxicological effects. Some PFAS are already regulated through the REACH and the EU's Persistent Organic Pollutants (POPs) Regulation.

The proposal present two regulatory options. The first option includes a total ban on PFAS after a limited 18-month transition period, and the second option includes a similar ban and transition period with some exemptions for certain categories of PFAS.

The proposal applies to the entire supply chain and will have major impacts on manufacturers, distributors and end users in the EU and beyond. Products containing PFAS may need to be redesigned or even discontinued. The question is whether the proposed restriction is appropriate and proportionate to reduce health and environmental risks and socio-economic impacts. The dossier submitters believe that social costs linked to a continued use of PFASs will exceed the costs caused by a ban. Some stakeholders, in its turn, object that this proposal is endorsed more by politics rather than science, and does not consider essential uses, the impairments of supply chains and the green transitions.

The fact is that not all PFAS are equally harmful, and the dossier submitters admit the presence of a large number of scientific uncertainties, nevertheless, the complete ban is proposed rather than approach the substances one-by-one. It raises questions in relation to the principle of legal certainty and proportionality. Besides, amid so high level of uncertainties, could the proposed restriction may be seen as an application of the precautionary principle and, if yes, does it fulfill the requirements of the precautionary principle?

The paper focuses on these questions and examines legal implementation and possible regulatory implications of the proposed restriction. By addressing the legal concerns it analyses the proposed regulatory options. On the example of PFAS, it values the regulatory efforts to implement far-reaching and ambitious targets amid high level of scientific uncertainty. Overall, the paper argues, that the proposal might open the door to more ambitious restrictions and will bring the EU one step closer to zero chemical pollution.

III D: Circular Economy / Concepts & Cases

Systematic review of circular construction in Western-European public and private legislation: Three "P's" on the road to circularity

Stéphanie van Gulijk; Jonas Voorter

Tilburg University

That Europe's construction industry needs to become more sustainable is no longer a question. Global climate developments, concerns about scarce resources and the vast price increases of gas and electricity have only made the need for sustainability and a new circular economic model more urgent. Over the past five to ten years – and especially after the 2019 European Green Deal -, policymakers, private parties in the construction and environmental sector and consumers have realized that the construction sector's footprint is far too large. But it is this sector in particular that has great potential to contribute to a sustainable environment with circular, energy-efficient building and renovation. Therefore, the European Commission and many Member States have pronounced the ambition to realize a circular built environment in 2030 with the overarching aim of making the European Union climate neutral in 2050.

The ambition of the European Commission to achieve a circular building environment is clear. However, to a great extent the European Commission depends on the Member States to pick up the bat and translate the EU ambitions into national policies and plans. To actually translate ambitions into concrete action, stimulating legal frameworks are needed that enable private and public parties in the construction sector to transform to a circular built environment. The translation of ambitions into practical legal instruments to implement them seems a very important indicator of its acceptance and speed. Generally, legal enforcement is considered to be an important driver for the transition to a circular economy. Therefore, with this paper we present the methodology and results of a 'systematic legislation review' that we conducted with the use of the main legal databases of the European Union and various Member States (The Netherlands, Belgium, Luxembourg and France). Within this systematic review, we aimed to find legislation that explicitly mentions the term 'circular economy' and link to the built environment. This systematic review provides insights into the current level and development of a genuine circular built environment.

After presenting this systematic legislation review and its results, we'll continue this paper with a discussion on the correlation between the law and achieving circular objectives in construction practice. One of our findings is that current legislation is strongly focused on the product aspect of circularity in construction projects, and to some extent on the procurement phase, while much less attention is drawn to the process aspect of the transition to a circular economy in construction like, for instance, enhancing cooperation between the various stakeholders and providing an adequate allocation of risks and responsibilities in order to facilitate innovative ideas and processes. We argue that these 3 P's (procurement, product and process) are equally important to realize a circular built environment, whereas they are unequally addressed in national policies and legislation.

III D: Circular Economy / Concepts & Cases

The legal transition towards a circular economy in the EU: The transformation of EU chemicals, product and waste legislation in light of the circular economy transition

Ida Mae de Waal

Utrecht University

The EU's transition towards a circular economy (CE) is one of the main building blocks of the EU Green Deal and as such aims to contribute to creating a more sustainable economy for the EU. In a CE, focusing on the whole life cycle of materials and products is considered key, but how does the legislation that governs this life cycle - EU chemicals, product and waste legislation – relate to the CE transition and what could be done to better align this legislation with CE objectives? The aim of this paper is to answer this question based on the results of three case studies (on (W)EEE, plastic packaging and batteries), for which both doctrinal and empirical legal research methods have been used.

Preliminary results of the case studies show that the current legal framework that governs the life cycle of materials and products does not (yet) fully support the CE transition. This paper will therefore also examine how EU chemicals, product and waste legislation could be modified to take away legal barriers and provide legal incentives for the transition towards a CE. Both concrete actions as well as more conceptual strategies with regard to aligning EU chemicals, product and waste legislation with the EU's CE objectives will be discussed. The relation between these possibilities and future developments in the EU regarding these areas of law, such as the proposals for a new Ecodesign Regulation, Packaging Regulation and Batteries Regulation, as well as the revisions of inter alia the REACH Regulation, Waste Framework Directive and Waste Shipment Regulation, will be taken into account.

Part of my ongoing PhD project, the research in this paper will be based on previous research papers and will contain the preliminary conclusions of my PhD research into the role of coherence in EU chemicals, product and waste legislation in light of the CE transition in the EU.

This paper fits well within the theme of the 10th EELF Conference, as it focuses on the legal developments that are taking place following the EU's ambition to achieve a circular economy by 2050. It specifically relates to sub-theme C because of its focus on the CE transition and as it will touch upon several of the legal developments that are taking place at the EU level right now. In addition, the paper relates to sub-theme A, since not only the relation between this legislation and the CE transition will be discussed, but also the coherence between EU chemicals, product and waste legislation in light of the CE transition will be examined.

III D: Circular Economy / Concepts & Cases

Ecodesign as an instantiation of the extended producer's responsibility principle

Heloísa Oliveira

University of Lisbon

The transition to a circular economy is presented today as a significant shift of paradigm in what concerns the environmental duties of producers. This paper argues that in fact this is a mere extension of the producer's environmental responsibility, which is an already consolidated part of EU Law; and that this is an important legal ground for justifying legal restrictions on economic freedom and private property rights that the transition to a circular economy requires.

The European Green Deal envisages a clean, circular, carbon-neutral economy. Because circularity is a multilevel feature, referring not only to products but also to production processes, the transition from a linear to a circular model entails a substantial regulatory burden on economic operators. This burden is to be framed, from a fundamental rights' point of view, as restrictions on fundamental rights such as the freedom to conduct a business and the right to property.

The Proposal for Ecodesign for Sustainable Products Regulation presents an ambitious legal framework in which producers will be required to follow performance standards that push strongly for efficiency on resource usage and force economic operators to share information through a digital passport. Even though environmental protection is consensually recognized as a right and/or a public interest that justifies restrictions on fundamental rights, the general principle of proportionality might be argued against regulation that imposes a review of products and processes' designs. It is therefore necessary to strengthen the legal grounds for such restrictions as a way to support a balancing of interest in favor of strong environmental protection.

Although the magnitude and structural nature of these changes might seem like a paradigm shift in what concerns the environmental responsibility of economic operators, we argue that they are in fact a mere expansion of what already occurred in waste law in the 1970s that led to the recognition of the producer's extended responsibility.

Extended producer responsibility ("EPR") might be considered as a mere instantiation of the polluter-pays principle. Possibly because of this and the heavy environmental costs resulting from waste management, EPR is still currently defined with a focus on the post-consumer stage of a product's life cycle. However, the recognition that the goal of prevention has not been suitably achieved by waste law has forced a regulatory shift upstream, to the design phase that actually almost entirely determines efficiency in resource-consumption.

We therefore conclude that the extension of the producer's responsibility from the producing phase to, firstly, a post-consumption life cycle phase to, currently, the pre-producing phase represents a mere evolution of the original assumption underlying the polluter-pays principle that those who profit from an economic activity must be responsible for the environmental cost that the activity represents, which means that restrictions of economic and property rights are fully justified. This also shows how the transition to a circular economy entails reshaping pre-existing concepts and legal principles.

III D: Circular Economy / Concepts & Cases

Nurdles or plastic pellets a threat for the environment that reclaim a legal response

Aitana De la Varga

Universitat Rovira i Virgili

“Nurdles are everywhere: how plastic pellets ravaged a Sri Lankan paradise” (the Guardian, 2022), “Nurdle pollution turns Spanish beach into 'plastic soup'” (France 24, 2023) and “Wave of plastic pellets washed ashore in France an 'irreversible' problem, says activist” (CBC, 2023) have in common an unsolved environmental problem, the plastic pellets. This is a raw material considered a microplastic that flies from the industrial processes and arrives to the soils and the coasts through the rivers or that invades the beaches as a consequence of a boat accident that transport this material. This plastic pellets are used from the industry as a raw material to make products. The consequences are a plastic pollution of the soils and the seas and it has a high impact on biodiversity and on health. The zero pollution action plan aims to reduce plastic litter at sea by 50%, and microplastics released into the environment by 30% by 2030. The EU has a big challenge to face this specific but big environmental problem.

On this work we are going to analyze the current and future environmental legislation, the general and the specific ones, that pretends to cope the situation and we are going to try to solve these questions. How can plastic pellets be prevented from reaching the soil, the coast and the sea? Who is responsible for taking the appropriate measures and to face the contamination? are the current measures sufficient? Which are the legal challenges?

To answer these questions, we will study the measures that involve the European Green Deal, the circular economy action plan, and the EU plastics strategy and his implementation; the several legislation and communications that try to develop this plastic strategy, that affects specifically the production of plastic, and the contamination but not only. For example, the COM (2022) 682 final (EU policy framework on biobased, biodegradable and compostable plastics) that pretend to avoid the fossil-based plastics or the COM (2022) 677 final “Proposal for a regulation of the European Parliament and of the Council on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC”, between others, that affects the production. But also, the Industrial Emissions Directive, and the Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, for instance.

The aim of the study is to identify the legal challenges and improvements to solve this environmental impact.

IV A: Climate & Energy / International Relations & CBAM

Impact of Green Deal regulations (CSDD, CBAM, Deforestation, IUU) on Indonesian value chains

Nicolas de Sadeleer

Université Saint-Louis - Bruxelles

The links between trade and investment are well known in international law. With the climate and environmental crises, the traditional trade paradigm has started to change by integrating sustainable development concerns. Some of the regulations that are fleshing out the EGD and that are in the process of being adopted by the EU institutions will have major impacts on third countries, notably in Southeast Asia where environmental pressures are significant.

As the largest economy (about one third of the ASEAN's GDP) and the country with the largest population (270 million inhabitants in 2020) in the region, Indonesia has become a major investment hub for EU undertakings (€25.2 billion in 2020), in particular with respect to the exploitation of natural resources. To attract foreign investors and protect its regulatory space, Indonesia has been concluding a new generation of bilateral investment treaties with European countries. These treaties confer substantive and procedural rights to investors, aiming to promote an investment friendly environment. Further, Indonesia participates in the international trading system as a member of the WTO, in a network of trade agreements and is negotiating a Free Trade Agreement with the EU in order to facilitate and create new market access, increase trade and investment, and promote sustainable development.

Indonesia and the EU have been developing a lasting economic relationship. Bilateral trade in goods between the two amounted to €20.6 billion in 2020, with EU exports worth €7.2 billion and imports worth €13.3 billion. The EU was thus Indonesia's 5th largest trading partner while Indonesia was the Union's 31st. Whereas the balance of the trade in goods is favourable to Indonesia, the trade in services is favourable to the EU. The relations have however not always been easy. On 30 November 2021, a WTO panel upheld all EU claims against Indonesia ruling that Indonesia's export ban and domestic processing requirement on nickel ore violates Article XI:1 of the GATT 1994. Indonesia is also challenging EU measures restricting the import of palm oil and oil palm crop-based biofuels in the WTO (European Union — Certain measures concerning palm oil and oil palm crop-based biofuels, DS593).

With a view to entice third countries to reduce the environmental and climate impact of their exports to the EU, the latter takes advantage of its position as the world's largest trading bloc in two ways. On the one hand, it includes sustainable standards in its bilateral trade treaties (sustainable development, environment chapters in CETA, EU-Vietnam, EU-Singapore) and on the other, in the aftermath of the EU Green Deal of 2020, it imposes unilateral trade measures (Process and production methods (PPMs), Corporate Sustainability Due Diligence (CSDD), and Carbon Border Adjustment Mechanism (CBAM)) on operators importing commodities and products from third States.

Building on the author's international collaborations, notably in Southeast Asian countries, the contribution will touch upon the impacts of the future due diligence directive, forest risk commodities regulation, and CBAM on the Indonesian regulations regarding the exploitation of natural resources.

IV A: Climate & Energy / International Relations & CBAM

Comparative Study of the Inspection and Enforcement Regimes of the EU and the Chinese National Emission Trading Schemes

Ying Xie

Maastricht University, Faculty of Law

Both the European Union and China, as the major emitters, have adopted the Emission Trading Scheme (ETS) to control Greenhouse Gases emissions. Furthermore, in 2021, both the ETS mechanisms got the opportunity to develop — the 'Fit for 55' package of the EU included the measures to update the EU ETS; a new 'ministerial rule' promulgated by the Chinese government came into force, which updates the framework for the Chinese national ETS. However, a well-functioning ETS depends on the inspection and enforcement regime, which can ensure compliance by the covered enterprises. This paper aims to critically review and compare how the inspection and enforcement of the EU ETS and the Chinese national ETS will be/are arranged in the new designs of both ETSS. Section 2 briefly reviews the legal frameworks of the EU ETS and the Chinese national ETS. Section 3 critically analyzes and compares the inspection and enforcement regimes of both ETSS. Section 4 puts forward suggestions for both to further develop their inspection and enforcement regimes. The last section gives a conclusion.

IV A: Climate & Energy / International Relations & CBAM

Decoupling or Decarbonizing? Interactions between the Emerging EU Carbon Border Adjustment Mechanism (CBAM) and the Developing China's Emissions Trading System (ETS) towards a Global Climate Club in a Polarized World

Meng Zhang

Lund University

Responding to feckless global climate actions in a polarized world, the carbon pricing-based approach is often hailed as the game changer in the ever-changing climate game, which has sparked mounting legal, policy and geopolitical challenges. As an ambitious global climate action leader who is striving to be the first climate-neutral continent in 2050, the EU has decided to implement the Carbon Border Adjustment Mechanism (CBAM) as complementary to its Emissions Trading Scheme (ETS) in 2023. On the other side, China, the largest carbon emitter in the world, has eventually launched its national ETS in 2021 as a key pillar for its renewed climate strategy – reaching carbon peak in 2030 and achieving carbon neutrality in 2060. In addition to those remarkable unilateral progress for carbon pricing mechanisms, the German G7 presidency in 2021 has vowed to advance a global climate club jointly adopting harmonized carbon market/pricing systems among countries with comparable climate policies. However, the geopolitical tendency of decoupling China with the rules-based international system is likely a sharp thorn in the overarching question: whether, how, and to what extent would the interaction between the EU's CBAM and China's ETS jointly provide legal, policy and geopolitical impetus for a global climate club agenda of harmonized carbon market/pricing mechanisms to achieve decarbonization in an increasingly polarized world? This presentation focuses on the nexus of legal, policy and geopolitical issues arising from carbon market/ pricing mechanisms at the unilateral (EU CBAM), bilateral (linking up the EU and China emissions trading systems – ETSs), and multilateral (climate club of global carbon markets) levels in a polarized world. Legal controversies and geopolitical considerations often interact with each other in the discourse of climate change. Especially in a polarized world, geopolitics' likes and dislikes can make or break legal/policy efforts on the EU CBAM, harmonized EU-China ETSs, and even a glob agenda for the climate club. Accordingly, this presentation will first sketch the law-policy-geopolitics interaction surrounding the EU CBAM, further scrutinize to what extent the EU CBAM will affect the link-up of EU-China ETSs based on the comparison of ETSs in the EU and China, and eventually suggest a 'smart-mix' model for a global climate club agenda based on the EU-China interaction that synergizes different but comparable carbon markets.

IV A: Climate & Energy / International Relations & CBAM

Climate neutrality in the EU and China: An analysis of the stringency of targets and the adaptiveness of the relevant legal frameworks

Dr. Haomiao Du PhD¹; Dr. Hao Zhang PhD²

¹ Utrecht University; ² Chinese University of Hong Kong

The European Union (EU) and China have committed to achieving net-zero emissions by 2050 and 2060, respectively. To explore the legal nature of these objectives and how the legal frameworks support their delivery, this article assesses the stringency of objectives and the adaptiveness of relevant legal frameworks. The former compares the objectives' bindingness, scope, prescriptiveness and precision of such obligations and compliance mechanisms. The latter compares the dynamism of mitigation policies and the legal institutions and processes that promote decarbonization. The article concludes that the climate neutrality objective is enshrined in the EU's climate law framework with a high degree of stringency overall. By contrast, China mainly incorporates the targets into administrative measures, the cadre responsibility and evaluation system, lacking formal rules and robust enforcement. By accelerating legal reform to integrate carbon neutrality into relevant regulatory instruments and addressing implementation problems, China explores its distinctive pathway to delivering on the objective.

IV B: Biodiversity / Peatlands & Forests

Increasing policy integration of biodiversity protection and carbon sinks

Jukka Similä¹; Minna Pappila²

¹ University of Lapland; ² Finnish Environment Institute (SYKE)

Carbon sinks and biodiversity protection may have co-benefits to each other in forests, and hence a same policy instrument may simultaneously promote the objectives of the coming Nature Restoration Law and renewal of the LULUCF regulation. The restoration of carbon rich ecosystems, such as forests, will contribute to addressing both the climate and biodiversity crisis, as noted in the LULUCF proposal. This is particularly important for countries with large forest resources, like Finland.

In Finland, forests are the main habitat for endangered species, with 31% of all endangered species living primarily in forests. In addition, forests are secondary habitat of more than 200 endangered species. Finland aims to achieve carbon neutrality by 2030, 15 years before the EU. However, Finland is unlikely to meet the EU's target of zero emissions from the LULUCF sector for the 2021–2025 period due to collapse of carbon sinks in forests, which have been realized only recently.

Forestry is the key factor behind the loss of biodiversity and the collapse of carbon sinks in forests. On the other hand, forestry has traditionally been a major industry in Finland, although its share of GDP is decreasing. Still it brings a significant amount of foreign income to Finland. There are more than 600.000 private forest owners in Finland and the constitutional protection of property regularly frames the political discussion how to promote environmental objectives in forests.

Until recently, the assumption behind Finnish policy has been based that carbon sinks in forests remain at high level without much policy effort. Hence, currently there is almost no policy instrument aiming to protect carbon sinks in forest. With regard to biodiversity, there are somewhat more means, although Finland is unlikely to achieve the objectives of the coming Nature Restoration Law without a policy change.

Our presentation is guided by the following question: Which kinds of regulatory instruments could advance the achievement of both the objectives of the proposed Nature Restoration Law and proposed amendments to the LULUCF regulation. We will divide the analysis into three parts. First, we will analyse interlinkages between the two EU proposals. Second, we will explore the ability of the current national regulatory instruments to ensure the achievement of the objectives of the proposals. Third, we will take a look at policy ideas developed in various research and R&D projects, which could advance simultaneously the achievement of the objectives of the proposals. In this context, we will discuss pros and cons of the policy ideas, how they could be incorporated into legal system and what would be the legal implications. While the national context frames the discussion, we assume that our observations will be relevant to other EU countries as well.

IV B: Biodiversity / Peatlands & Forests

Synergies within the EU Green Deal. A peatland case study.

Matilde Meertens

Ghent University

The Commission's proposal for a new regulation on nature restoration – commonly referred to as the Nature Restoration Law ('NRL') (European Commission 2022) – is the latest demonstration of the European Union's efforts to implement the objectives of the EU Green Deal. Indeed, when adopted, this ambitious law proposal could be the much-needed catalyst for environmental action within the EU. In this regard, it will also contribute to the fulfilment of the objectives of the EU Biodiversity Strategy for 2030 (European Commission 2020). The approach of the NRL is ground-breaking as it encompasses binding restoration targets for the first time.

Article 9 of the NRL includes targets on the restoration of peatlands. Although they only cover around 6% of the global land area, 40% of all plant and animal species live or breed in them. Importantly, they do not only play a crucial role in supporting biodiversity, and the regulation of natural processes, they also serve as large – much larger than forests – carbon stores. When degraded, however, peatlands re-release this carbon sequestered in their peat, which results in higher CO₂ emissions. For many years, peatlands have been considered wastelands. Unsurprisingly, drainage to transform them into arable land is the main driver for their large-scale destruction. But the perception of peatlands is changing and appreciation for the different ecosystem services peatlands provide is growing, the specific targets for peatland restoration is but one example thereof.

This presentation will tackle the EU Green Deal from the perspective of peatlands. Indeed, the characteristics of these fragile ecosystems make them a perfect case study to explore the connections between the different instruments adopted within the EU Green Deal framework. Departing from the NRL, I will explore how this latest accomplishment of the EU Green Deal agenda will interact with currently existing policies, such as the Common Agricultural Policy (Regulation 2021/115), the Farm to Fork Strategy (European Commission 2020), the different Climate strategies (European Commission) and the EU Soil Strategy for 2030 (European Commission 2021). The identification of synergies, e.g. a policy measure that also contributes to the target of another instrument, and potential tensions, e.g. contradicting norms or targets, will enable me to identify those areas where the carrying out of the EU Green Deal could be further improved.

IV B: Biodiversity / Peatlands & Forests

Achieving good water status under the Water Framework Directive: an obligation to reduce drainage in Dutch peatlands (by 2027)?

Martijn Van Gils

Utrecht University

The Water Framework Directive (WFD) requires EU Member States to take the necessary measures to prevent the deterioration of the status of all bodies of surface water and all bodies of groundwater, including the ecological and chemical status of bodies of surface water and the quantitative and chemical status of bodies of groundwater (Article 4(a)(i) and (b)(i) Water Framework Directive). The Directive also requires Member States to achieve good surface water and groundwater status, by 2027 at the latest. Achieving good surface water and groundwater status is a major challenge for the Netherlands: currently, the water quality of surface waters is the lowest of all EU Member States, and most surface water and groundwater bodies are far removed from good status (<https://www.wur.nl/en/show-longread/bottom-of-the-class-for-water-quality.htm>).

In Dutch peatlands, achieving good surface water and groundwater status may be even more difficult. First, peat oxidation, which occurs when peatlands dry out as a result of drainage for agricultural use and evaporation in summer, can affect the quality of surface water and groundwater. This leads to leaching of nutrients such as nitrate, phosphate and sulphate into surface and groundwater, which can also affect the ecological status of surface waters. Second, drainage of peatlands could affect the quantitative status of groundwater bodies in peatlands by lowering the groundwater table. 'Quantitative status' is defined as the degree to which a groundwater body is affected by direct and indirect abstractions, while 'good quantitative status' means that the groundwater level is such that the available groundwater resource is not exceeded by the long-term annual average rate of abstraction.

In order to comply with the WFD, the Netherlands may therefore need to reduce drainage in peatlands, so as to reduce peat oxidation and the abstraction of groundwater. However, there are various legal questions concerning the relationship between the WFD and the drainage of peatlands: is drainage a form of 'abstraction' as defined in the Directive? Could drainage, even if it does not exhaust the available groundwater resources, affect the status of a groundwater body, for example by causing damage to terrestrial ecosystems directly dependent on the groundwater body? And should drainage on agricultural land near Natura 2000 areas be further reduced, as the Habitat and Birds Directive are also applicable to these protected areas?

This paper answers these and other legal questions as part of a larger research question: to what extent does the WFD require the reducing of drainage in Dutch peatlands? The paper fits well within the theme of the 10th EELF conference. Although the WFD precedes the European Green Deal by many years, its full implementation will have far-reaching consequences and, in combination with other EU legislation such as the (revised) LULUCF Regulation, will lead to a transformation of the agricultural use of peatlands. It fits particularly well in subtheme D (Biodiversity, nature conservation and agriculture).

IV B: Biodiversity - Peatlands & Forests

Caring for forests here and abroad: The EU's strategies for sustainable forest ecosystems around the world

Gauthier Martens

Université Saint-Louis - Bruxelles

In late 2019, the new von der Leyen Commission proposed the European Green Deal (EGD), a package of initiatives with the aim of achieving climate neutrality by 2050. Among the measures put forward, the Commission insisted on the primordial role of forests, both inside and outside the boundaries of the European Union.

Within the EU, the New Forest Strategy for 2030 aims to promote sustainable forest bioeconomy for long-lived wood products, ensure sustainable use of wood-based resources for bioenergy, promote non-wood forest-based bioeconomy, develop skills and empower people for sustainable forest-based bioeconomy, with the ultimate objective of protecting, restoring and enlarging resilient and multifunctional forest ecosystems in the Union.

Beyond the frontiers of the Union, the Commission acknowledges, on the one hand, that forest degradation, including, notably, deforestation, remains a dire issue with, according to the FAO, more than 420 million hectares of forest lost around the world between 1990 and 2020, i.e. an area larger than the EU ; and on the other hand that, as the biggest importer of commodities linked to deforestation (in particular wood, cattle, soy, palm oil, coffee and cocoa) and with said consumption expected to steadily increase by more than 200,000 hectares of deforestation per year until 2030, the Union and its member states have a particular responsibility. The Commission thus submitted a proposal for a regulation on the making available on the Union market as well as export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010 (hereafter Forest Risk Commodities Regulation Proposal).

The contribution shall thus mainly relate to subtheme H (global responsibility), and incidentally to subtheme D (biodiversity, nature conservation and agriculture). It shall analyse the interplay between the Forest Strategy for 2030 and the Forest Risk Commodities Regulation Proposal, how they fit in the larger EGD framework to improve the quantity and quality of forests inside the EU and beyond.

Concerning the latter, the contribution shall study how the EU now implicitly makes use of the so-called Brussels Effect in order to incentivise an increase in the offer and trade of sustainable commodities and, conversely, a decrease in the risks for forests around the world.

IV C: Pollution / Water & Ocean

The potential of the EU Water Framework Directive for reducing emissions of pollutants is limited: a case study on river basin specific pollutants in Swedish environmental permitting processes

Henrik Josefsson¹; Annika Nilsson²

¹ Department of Business Studies, Uppsala University ; ² Department of law, Uppsala University

River basin specific pollutants (RBSPs) are supposedly a key tool to fulfil the EU's Water Framework Directive (WFD) goal of good ecological status in all European waterbodies. A review of the regulation of RBSP is currently underway, including both the WFD and EU Environmental Quality Standards Directive (EQS) as there has been too much variation between Member States as regards the quality standards and threshold values set at national level for RBSP (and groundwater pollutants). It is e.g., suggested that RBSP should be included under good chemical status instead.

The RBSPs provide a tool to manage chemical pollution identified as a national priority. An important question is if the management related to RBSPs leads to reduced emissions, an issue we investigated using Sweden as a case. Swedish measures implemented under the WFD mainly rely on environmental permitting and supervision. We, therefore, assessed how RBSPs have influenced 1) permit proceedings in the Land and Environment Court of Appeal during the 2010s. Despite permit-review being an important measure highlighted in the WFD and in Swedish programs of measures, all cases appealed to higher court were initiated by the operators/permit holders. The permissibility of environmentally hazardous activities was not impacted by RBSPs in any instance. Permit conditions addressing RBSPs were discussed in ~1% of all environmental cases, mainly resulting in conditions demanding further inquiries regarding emissions and concentrations of a limited number of RBSPs (i.e., metals and nitrogen in the forms of nitrate and ammonia). Open-ended conditions and delegation allowing for updating permit conditions if additional RBSPs are identified were suggested but rejected by court as these conflict with fundamental principles of precision and predictability of permit conditions.

If RBSPs as management tool has little impact on emissions from activities requiring environmental permits and thereby water quality will the suggested changes to the RBSP regulation in the WFD and the EQS change this? From a Swedish horizon this is unlikely as the review will not change underlying problems with the environmental monitoring, the programs of measures and how the court view the effects of RBSP emission on water quality.

IV C: Pollution / Water & Ocean

Is There Effective Implementation of EU Water Law? A Comparative Analysis.

Susanna Kaavi

University of Helsinki

Differences between national legal systems are inevitable reality when considering legal responses to global issues. It is also very much the case when it comes to EU law. EU regulation must be effectively implemented in all Member States but the variations in the implementation can cause significant differences in the regulatory environment and bring different legal questions to the centre of discussion.

This presentation discusses the implementation of EU's water related regulation. The main focus is on the EU Water Framework Directive (WFD) and its implementation in various Member States including at least Sweden, Germany and Austria. The aim is to provide information on how the implementation of the WFD varies within those states. What are the obstacles to effective implementation faced by the states? Which questions have become central in the legal discussions relating to water management?

There are differences within the ways in which the states have transposed the content of the WFD into their respective national laws. Moreover, they have created different administrative structures to oversee the implementation of the Directive and chosen different ways of organising transboundary cooperation. From this it follows that, even though the states are implementing the same legal rules, the obstacles of effective implementation are country specific. Likewise, the questions discussed by courts and legal scholars have different focus. The topics that have become central in the analysed states include: the incorrect transposition of the environmental objectives of the WFD, reluctance to follow the CJEU case law regarding WFD, and legitimacy issues of the administrative structure. Moreover, the states struggle with insufficient funding of the water management regime.

IV C: Pollution / Water & Ocean

Coherent and Cross-compliant Ocean Governance for Delivering the Green Deal for European Seas

Froukje Maria Platjouw

Norwegian Institute for Water Research

The European Green Deal, adopted in 2020, calls for deeply transformative policies in all relevant sectors to create a fair and prosperous society where economic growth is decoupled from resource use, natural ecosystems are protected and restored, and human health improved. Several recent strategies and plans, including the EU Biodiversity Strategy for 2030, the EU Zero Pollution Action Plan, the Strategy on Climate Adaptation, as well as the EU Strategy for a Sustainable Blue Economy, set numerous environmental goals for the European Seas. These ambitious goals have clear implications for EU policies regulating the marine environment. Given the nature of the Green Deal as a package of strategies, goals and targets, it should be questioned whether current EU policies and their implementation are fit-for-purpose to realize all Green Deal goals and targets. Realizing the Green Deal requires that delivering certain strategies and plans' goals and targets does not adversely affect delivering other strategies and plans' goals and targets, it thus requires cross-compliance.

In legal terms, compliance is about transposing, implementing, and applying legal requirements correctly and promptly. Usually this concerns compliance in relation to single policies. Several barriers towards compliance with single policy objectives exist. Cross-compliance requires overcoming these traditional compliance challenges in relation to the main policy at hand, as well as supporting the delivery of other policies' goals, targets and measures.

The Horizon Europe funded CrossGov project explores how policy (in)coherence affects the possibility to achieve cross-compliant outcomes, and which factors positively or negatively impact this relationship. Policy coherence refers to how well (or not) different policies work together. Coherence can be defined as the extent to which policies reinforce each other by promoting synergies or reducing conflicts between their objectives and measures both in design and implementation. Coherence is important to realize the Green Deal. Low coherence increases the need to make trade-offs and decisions that negatively affect achieving multiple policy objectives. It could also entail that cross-compliance with overarching Green Deal goals is not realized at its full potential.

Cross-compliance is likely to be affected by (in)coherent EU policy landscapes, but also by numerous other factors as will be explored in the CrossGov project. Policies are often designed to promote single, specific interests and are often managed by specialized institutions that have their own legal mandates, organizational structures, internal logics and traditions, and external networks of related policy actors. Complex multilevel governance arrangements, delineated by sectoral responsibilities, power balances across actors and sectors, political inertia and knowledge gaps, amongst others, are all relevant factors that need to be addressed in situations where multiple, and sometimes conflicting, objectives are aimed for.

This presentation introduces the concepts of coherence and cross-compliance, including various dimensions and examples. The presentation also explains how enhanced coherence and cross-compliance of policies across sectors and between governance levels can underpin progress towards the EU Green Deal's goals and targets for the European Seas.

IV C: Pollution / Water & Ocean

Diving into the marine dimension of the European Green Deal: something old, something borrowed, but how new and blue?

Nikolaos Giannopoulos; Mathilde Hoarau

Utrecht University

The European Green Deal has been presented by the EU Commission as ‘Europe’s man on the moon moment’, a new growth strategy to transform the EU into a sustainable, climate-neutral economy and society by 2050.

To succeed, this ambitious vision must cover all policy sectors and endorse the interrelatedness of natural ecosystems, including marine ecosystems. Covering two thirds of the planet and more than 65% of the EU territory, the ocean operates as the climate regulator and conditions environmental health. After being the ‘Cinderella’ of the climate change discourse for years, it is no longer a mere victim of climate change but a condition sine qua non in tackling the vexed climate crisis due to its key role in climate mitigation, adaptation, and sustainable economic growth.

Relevantly, the EU Green Deal acknowledges that climate neutrality presupposes nature-based solutions, such as healthy and resilient oceans. In the words of the Commissioner for the Environment, Fisheries and Maritime Affairs: ‘to be truly green, we must also think blue’. The ‘blue’ dimension of the European Green Deal aims at restoring marine biodiversity, promoting sustainable fishing practices, reducing marine pollution, and at the same time developing the blue economy to reconcile the need for new jobs and economic growth while promoting environmental sustainability and reducing greenhouse gas emissions.

Nonetheless, as marine-related targets and actions lack concreteness, this insufficient splash of blue questions the adequacy of the EU Green Deal and its strategies to achieve the necessary radical transformation of the Blue economy. Are the marine-related policies characterized by an increased level of ambition compared to the pre-existing framework, and are they complemented by adequate delivery instruments? Further, are potential policy conflicts reconciled, and if yes, how?

To that end, the proposed paper explores the marginally analysed in the literature marine dimension of the European Green Deal and the raft of subsequent marine-related EU strategies – i.e., EU Offshore Renewable Energy Strategy, EU Blue Economy Strategy, FuelEU Maritime Initiative – to identify whether they usher in a new era for ocean sustainability. More concretely, the contribution first maps out the marine-related policy objectives and targets – both qualitative and quantitative – in four significant marine sectors, namely energy, food, transportation, and marine biodiversity conservation, in order to determine the ‘added value’ of the European Green Deal. Does it establish new or reinforce existing policy targets and are these targets coupled with necessary – regulatory and economic – delivery mechanisms? Attention is paid to – any – recent developments, such as the EU Action Plan on the protection and restoration of marine ecosystems for resilient fisheries. Last but not least, the contribution examines the potential synergies and frictions between the identified marine policies and targets. It underlines that striking a fair balance and safeguarding coherence among the economic, social, and environmental is indispensable for the success of this high-reaching endeavour, given the indivisibility of its policy objectives.

IV D: External Effects / Greening global value chains

Regulating the CCU Value Chains: going beyond the silos of environmental law

Emilie Yliheljo; Tiina Paloniitty

University of Helsinki

Rapidly developing carbon, capture, use and storage-technologies (CCUS) are gaining an increasing role in mitigating climate change. These novel cross-sectoral technologies – mandatory for achieving the EU Green Deal objectives of a green and digital sustainability transition – challenge the traditional representation of environmental law divided into distinct sectoral silos, interlinked yet separate with at times overlapping, at times conflicting aims. The reality is much more varied and diverse, calling for novel concepts to advance understanding.

The topic of the presentation is the regulation of CCU value chains at the intersection of different policy sectors. To prosper, CCU technologies have not only to fit into but also reconcile several existing regulatory frameworks – such as climate and energy legislation, circular economy and waste regulation, and biodiversity governance. We identify, map, and systematize the relevant regulatory strategies and regulation applicable to CCU value chains that vary depending on the source point (material), process and outcome.

As the value chain can consist of various components, resulting in countless combinations, we have created a hypothetical yet realistic value chain that could take place in Finland, utilizing the raw materials and industrial sectors present there. In our analysis of the regulatory landscape of that value chain, our aim is also to identify possible regulatory barriers and incentives to the formation of new sustainable CCU value chains. As an outcome we create new concepts to analyze the rich regulatory landscape and identify the interactions between different sectors of environmental law and governance occurring throughout sustainable CCU value chains. These concepts allow us to clarify the maze of regulation relevant to the theme, and identify the drivers and obstacles regulation may cause to CCU technologies and value chains.

IV D: External Effects / Greening global value chains

Decarbonization of global value chains under the European Green Deal

Katerina Mitkidis; Viktoria Obolevich

Aarhus University

While the European Green Deal (EGD) focuses on transforming the European Union (EU) towards environmentally sustainable and carbon neutral economy, it is recognized that this cannot meaningfully happen without involving global value chains (GVC). GVCs are therefore repeatedly mentioned within the EGD in respect to specific areas and product types, such as agriculture and batteries, as well as in a more general context. Under section 3. titled The EU as a global leader the EGD states: 'As the world's largest single market, the EU can set standards that apply across global value chains.' Here the EU takes on the responsibility to positively influence the green transition of economies and economic actors outside of its borders. Decarbonization of GVCs stands at the forefront of these efforts.

Decarbonization of GVCs is not an easy goal. The current global economy is characterized by a geospatial fragmentation of consumption and production. Goods moves across the globe, as the production takes the advantage of different ambition of regulatory standards, including climate policies and laws, in various jurisdictions. This makes GVCs a very difficult object to regulate. But they are also a very important object to regulate, since upstream GVCs are responsible in average for about 45% of greenhouse gas emissions emitted in a product's lifecycle. The EU exerts efforts to help decarbonize GVCs and thus to ensure that GHG emissions do not simply move outside of its borders in the production phase and re-enter its market as embedded emissions in final products. However, due the principle of state sovereignty, there is no single regulatory solution, the EU cannot regulate outside of its jurisdiction. Instead, a mix of public and private regulatory tools is used to curb GHG emissions in GVCs.

This contribution reviews the EU's regulatory tools to decarbonize GVCs and focuses on the recent legal developments in this area. We aim to provide a comprehensive overview of the tools and discuss their interactions. In line with the academic literature, we divide the tools into three categories: market-based tools, transparency regulation, and procurement. In respect to market-based tools, we focus on the EU's proposal of a carbon border adjustment mechanism and the rules relevant to curbing carbon leakage under the Emission Trading Scheme Directive. After that we move to the transparency regulation. Here, we discuss the new Corporate Sustainability Reporting Directive in the context of GVCs' decarbonization. Product labelling follows, where we discuss the effects of the energy labels rescaling. We conclude this part with the analysis of the contribution of the proposed Corporate Sustainability Due Diligence Directive (CSDDD) to the decarbonization of GVCs. Finally, we turn to procurement, where we discuss the current public procurement directives and the EU green public procurement criteria. We complement this with the discussion of how private procurement is relied on as a central tool for the CSDDD's implementation. We conclude with an evaluation of the tools and identification of gaps and problems in the regulatory web that the EU should focus their GVCs' decarbonization efforts in future.

IV D: External Effects / Greening global value chains

Climate transition plans under a draft Corporate Sustainability Due Diligence Directive

Monika Feigerlova

Institute of State and Law, Czech Academy of Sciences

The proposal by the European Commission for an EU Directive on Corporate Sustainability Due Diligence (CSDDD) imposes an obligation upon major greenhouse gas emitters (both EU and non-EU companies operating in the internal market) to prepare a climate transition plan as a means of ensuring the alignment of company's business model with the transition to a sustainable economy, and the limiting of global warming to 1.5 °C in line with the Paris Agreement. Article 15 of the proposal is thus explicitly devoted to combatting climate change and is seemingly outside of the mandatory sustainability due diligence process.

In line with the EGD achieving a climate neutral and circular economy requires the full mobilisation of industry, which accounts for 20% of the EU's greenhouse gas emissions. Companies need to focus on their long-term development and sustainability aspects compared to short-term financial performance.

The isolated concept of a climate transition plan and the carve-out of adverse climate impacts from environmental and human rights due diligence under the CSDD Directive seems to be a deviation from the OECD Guidelines on Multinational Enterprises and the UN Guiding Principles on Business and Human Rights. Climate change and its adverse consequences have been considered as a human rights issue by the Intergovernmental Panel on Climate Change, the United Nations Human Rights Council, and in emerging climate change litigation against companies. The relationship between climate due diligence, on one hand, and human rights and environmental due diligence, on the other, remains a controversial topic under the draft CSDD Directive.

Climate change is not explicitly mentioned in the current version of the 2011 OECD Guidelines given their date of adoption, however, a number of National Contact Points established in each country to implement the Guidelines have already dealt with complaints against companies in relation to the lack of disclosure of CO₂ emissions or the failure to set a greenhouse gas emission target. There seems to be a trend under the OECD case law that climate change can be subsumed under environmental aspects and that states expect companies to perform climate due diligence processes (e.g. (BankTrack, et al. v. ING Bank).

The scope of companies covered by the CSDD Directive is narrower than under the OECD Guidelines; moreover not all companies subject to CSDD Directive need to set a greenhouse gas emission target in the climate transition plan.

The question arises as to what is the content of responsibility of an EU company to which both the CSDD Directive and the OECD Guidelines apply in terms of adverse climate change impacts, why no or insufficient sanctions are addressed in the new EU instrument with respect to climate transition plan and how is Article 15 connected to sustainability due diligence under the draft CSDD Directive.

IV D: External Effects / Greening global value chains

Responsible mineral sourcing for green transition – legal perspective to the local social acceptance in exploration

Saara Österberg

University of Eastern Finland

The subtheme of Session A focuses on the role of law in societal transformation. The theme is crucial in the sourcing of the Critical Raw Materials for the value chains of the green industry in EU. Currently, European industry is dependent on the import of raw materials from third countries. It is problematic both from the perspective of material autonomy of the EU and the responsibility of green value chains. That is why the EU aims to increase and boost the internal sourcing of Critical Raw Materials. The local acceptance is not only important for mining projects but also for early mineral exploration. The experience of injustice may rise a criticism not only towards the companies, but also towards the authorities and national mining legislation. In order to secure their (local) operating conditions, the companies have developed their responsibility practices.

This study is a case study in Finland, including two different target areas in exploration: Savukoski (in the Eastern Lapland) and Sotkamo (in Kainuu region). There have been several decades exploration activities in both areas. In Sotkamo, it has led to large-scale mining operation with multiple local impacts. The meaning of social awareness of the critical raw materials will be analyzed in this study of SEMACRET project for developing the local acceptance of mineral exploration. What is the significance of the revised legislative procedures in terms of awareness and how does it affect people's attitude towards exploration projects of critical minerals? Exploring the key factors and their interconnections enables developing the framework of social acceptance for the sourcing of Critical Raw Materials in EU.

V A: Climate & Energy / Energy vs. Nature

Fair weighing up of interests in balancing climate protection and other environmental concerns for allowing renewable energy projects

Paula Galbiatti Silveira

Hasselt University

Law plays an essential role in establishing mitigation measures to diminish GHG emissions and protect climate. For that, the EU Green Deal supports renewable energies as a priority activity for climate protection benefits. For example, the recent European Council Regulation (EU) 2022/2577 sets a temporary framework to accelerate the deployment of renewable energy, considering it overriding public interest and serving public health and safety when balancing legal interests. As the energy transition means promoting renewable energy sources for climate protection while ensuring other environmental interests, and renewable energy projects can also cause significant environmental and social negative effects, this abstract discusses the compatibilization of such interests (internal environmental conflicts) in Environmental Law. The mentioned can arise when different interests collide, such as biodiversity protection and installation of renewable energy projects. This can be observed in the same Regulation, which also accelerates the permitting process and exempts some cases from impact and species assessments. This abstract then argues that Law has solutions for such compatibilization in the concrete level of decision-making, and focuses on the discretionary margins and the fair weighing up of concerns. Decisions to solve conflicts can be discretionary or bound by legal criteria. When the decision is discretionary, all different concerns must be balanced. However, the exercise of discretion is not unlimited but subject to substantive constraints that entail the fair weighing up of concerns. Even though discretionary powers are provided to authorities in permitting decisions, discretion does not mean arbitrariness. Several criteria and requirements are established to reduce the discretionary space and the freedom given to authorities, such as the adoption of appropriate species conservation measures in the case of the mentioned Regulation. The weighing up of interests sets the renewable energy project with a heavyweight to be balanced with other interests derived from adverse effects, which are scaled according to mitigation and compensation possibilities. However, for non-discretionary decisions, some interests are not subject to weighing up. Such interests are significant encroachments in nature and landscape, to which a heavyweight is given previously by the legislator, such as rare fauna species or protected areas.

V A: Climate & Energy / Energy vs. Nature

Bats versus wind turbines - The delicate relationship between permitting procedures and species protection

Charles-Hubert Born

Université Catholique de Louvain

For a long time, species protection in the EU has not been very effective, but it has become a major issue in spatial planning. The prohibition of the destruction of specimens, the intentional disturbance of the protected species and the deterioration of their breeding sites and resting places (art. 5 Birds Directive; art. 12-13 Habitats Directive) applies to any act or activity likely to cause the prohibited effect. The implementation of projects subject to a permit often falls within the scope of these protection measures and therefore requires the granting of a "species" derogation (Art. 9 Birds Directive and Art. 16 Habitats Directive). Thus, when the commissioning of a wind farm may lead to collision mortality of protected birds and bats, a derogation might be required under the species protection provisions of the directives.

The legal challenge arises from the fact that, unlike the Natura 2000 regime, the species protection provisions don't include any explicit integration between the internal authorization procedures and the 'species' derogations, which can lead to contradictory decisions on both sides. For example, an authority may be called upon to rule on a permit for a project likely to involve the violation of protection measures when no derogation has been requested or issued. Conversely, the competent nature administration may be seized of an application for a derogation prior to a permit application for the same project and must rule on it before it is issued. In the event of refusal, it renders the permit application devoid of purpose. Another question is raised by the linkage with the environmental impact assessment and the public participation procedures.

In these complex interactions, the question arises both of the legality of the permit (if it is issued without respecting all the conditions for granting the derogation) and of the criminal, civil and environmental liability of the operator (who operates his wind farm without all the necessary authorisations).

There are, however, bridges between these police legislations, the most obvious of which being the impact assessment procedure, possibly combined with a consultation of the competent nature administration. These non-specific forms of linkage have been the subject of recent case law of the Court of Justice (aff. C-463/20, asbl Namur-Est Environnement), which attempts to clarify the relationship between permits and derogations, but not without leaving some grey areas. Even more recently, the Commission's recommendations and Regulation 2022/2577 "RePowerEU" have also made certain changes to the permit and derogation procedures, with a view to speeding up the development of renewable energy.

The purpose of my presentation will be to provide some legal guidance on this issue, which is at the heart of a growing litigation against renewable energy development projects and therefore the Green Deal. I will investigate possible ways to improve the integration of species protection into project authorisation processes.

V A: Climate & Energy / Energy vs. Nature

Derogation from the requirement to conduct the Environmental Impact Assessment for the Renewable Energy Projects: justification, legal basis and scope

Sergiusz Urban

WKB Lawyers

The current economic and political situation, in particular the war in Ukraine and the related perturbations in the energy market, has effectuated in significant modification of European Union approach to the development of the energy-related project and especially the renewable energy sources.

These new circumstances persuaded the EU legislator to give a serious consideration and new momentum to this issue thus streamlining the related investments. Apparently, it believes that the progressive legislative measures are of uttermost importance to enable faster implementation of renewable energy source (RES) projects compared to standard solutions.

One of the most significant obstacles standing in the way of efficient investment processes in this area has been identified as 'authorisation procedures', a number of which are related to environmental protection. As a response, the European Union presented its REPowerEU Plan in May 2022 and the Council Regulation (EU) 2022/2577 of 22 December 2022 laying down a framework to accelerate the deployment of renewable energy has been issued soon afterwards.

The aim of this paper is to examine in depth the justification for the intervention of the EU legislator, to establish its legal basis and identify the provisions covered by these measures, as well as to reconstruct precisely the nature and scope (temporal, material and procedural) of the derogations introduced in this matter.

Based on the results of the analysis carried out, conclusions are drawn, especially in the context of the "do no significant harm" pledge and "green oath" of the European Union.

V A: Climate & Energy / Energy vs. Nature

Tension between offshore wind energy and marine nature conservation

Sebastian Loecker

Rheinische Friedrich-Wilhelms University Bonn

The research project addresses the tension between the political expansion goals of offshore wind energy and marine nature conservation.

The German legislator has committed to significantly accelerate the expansion of offshore wind energy. The installed capacity of offshore wind turbines is to be increased to 70 gigawatts by 2045. Compared to the current state, there will be approximately nine times as many offshore wind farms in operation by 2045 as there are today. The research project touches upon themes in energy transition, environments protection, the protection of biodiversity and an evaluation of the current legislative framework concerning the plan to increase offshore wind energy along the German coast.

A major challenge in the expansion of offshore wind energy lies in the limited land capacities in the German exclusive economic zone. Due to the limited capacity of the German coast, the question arises whether marine protected areas will suffer from the expansion. The legislator has recently allowed offshore wind parks to be planned in marine protected areas which was previously prohibited. It is unclear whether opening up those areas to offshore wind energy is compatible with the relevant European legal framework to protect the marine environment.

In addition to the desired energy transition, one must also emphasize the biodiversity crisis. Marine biodiversity and marine ecosystems are already under too much pressure in the North Sea and the Baltic Sea. Where should protection and compensation areas come from if offshore wind energy is already fully utilizing the limited areas of the German exclusive economic zone? Thus, the goal of expansion of offshore wind energy and protecting marine biodiversity might create tension in the use of the limited German coast. Climate protection and the ongoing Ukraine war are accelerating the demand for offshore wind energy in Germany. Environmental protection, especially the protection of biodiversity, must not be neglected in this process.

The research project mainly relates to the themes “Climate Governance and EGD energy policy –in the face of the energy crisis” and “Biodiversity, nature conservation and agriculture”. The European legal framework is undergoing major changes and provides the German legislator with numerous guidelines for national implementation (e.g. Fit-for-55-package, REPowerEU, Renewable Energy Directive). The research project aims to consider the problems of renewable energy expansion from the perspective of nature conservation. In this context, the Biodiversity strategy and Natura 2000 expansion should be particularly highlighted.

V B: External Effects / Transfers & Accountability

European Green Deal: A Silver Bullet in Achieving Regional Energy and Climate Governance in Southeast Europe?

Irakli Samkharadze

FU Berlin / OMNIA

Although the European Green Deal (EGD) has garnered considerable attention in both academic and practical circles, extraterritorial application of the initiative remain substantially under researched. Addressing to this deficit, the paper echoes the subtheme A and – to some degree – subtheme B of the conference and engages itself in analysing the regional and domestic implications of EGD for Southeast Europe via expanding the scope just beyond the EU borders. That said, the paper particularly chases the regional energy and climate governance question in the aftermath of the so-called EU's climate-neutrality ambition and tries to identify the options of designing the regional governance regime by analysing the Energy Community Contracting Parties' approaches in their respective energy transition processes towards 2050.

To tackle this research question, a three-step approach is applied:

The first part of the paper will be initiated by taking a stock of the EU's external energy policy tools and competencies laying down constitutional foundations around Article 194 TFEU and Article 8 TEU. It will further elaborate on relevant thematic policy and regulatory framework, which is in place in the Energy Community following the launch of EGD and adoption of the EU Climate Law. The provisions of the Clean Energy Package as well as the potential forthcoming expansion of the Energy Community acquis by the envisaged Fit-for-55-Package and network codes boosting regional market integration will be analysed with a view of creating ever more single regulatory and market framework in Southeast Europe.

Secondly, the applicable national legislative frameworks on energy and climate governance will be studied to analyse how the respective energy governance systems are set to evolve. For that purpose, particular emphasis will be placed on the mechanics of the Governance Regulation with the aim to analyse to what extent the selected elements of National Energy and Climate Plans (as well as long-term strategies covering 30 years) can serve as foundation for a regional market governance. An experience of EU member states will be largely adopted in this section to seek better understanding on insights of the EU climate governance and to what extent this can be replicable to the Southeast European regional sustainability governance concept. In doing so, additional stocktake will be carried out to assess whether extra factors (i.e. EGD-promoted policy areas and initiatives) can exert influence on such a regional governance setup.

Based on the performed analysis, as a concrete output of the paper, targeted recommendations will be prepared addressing the question of how existing regional political processes and instruments can be improved to give greater priority to a regional cooperation. Ideas for institutional architectures of regional governance will also be deployed to eliminate practical limitations to regional cooperation and define the ways of achieving regionalisation. These options could include the setup of the Southeast European network for cooperation (i.e. 'network governance'), partnership frameworks ('soft' governance with flexible structures and task-specific policy-making arrangements as opposed to "hard" rules-based governance) or other potential instrumental approach on regional energy transition governance mechanism.

V B: External Effects / Transfers & Accountability

The Extraterritoriality of the European Green Deal: Accountability of Multinational Corporations and the Rights of Indigenous Communities in Africa

Ikechukwu Ugwu

University of Silesia in Katowice

The EGD is an ambitious plan to make Europe the first climate-neutral continent by 2050. It aims to transform the European economy to be more sustainable and inclusive while also protecting biodiversity and the environment. Some experts have indicated that for the EGD to be actualised, there is a need for collaborative efforts with other stakeholders outside of the European Union. This is especially so considering that many European multinational corporations are outside the EU, contributing to climate change issues and environmental pollution. Africa is home to many natural resources, mainly located within indigenous peoples' territories. Reports have shown that while conducting business activities, MNCs pollute the environment and abuse the human rights of indigenous communities to a clean environment. To this end, this paper discusses to what extent the EGD can influence the behaviour of European MNCs operating in Africa. To do this, the paper will examine European policies formulated within the context of the EGD that could be utilised to achieve accountability of MNCs in Africa. For instance, the 2022 Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence mandates companies to consult with stakeholders throughout the process of carrying out due diligence actions (art 6(4)). It defines stakeholders to include indigenous peoples (Preamble, Para 26a) and applies to MNCs registered in the EU together with their subsidiaries. Similarly, the EU Biodiversity Strategy, one of the EGD's key initiatives, calls on EU Member states to ratify international law instruments that protect the rights of indigenous peoples. These instruments, like the UN Declaration on the Rights of Indigenous Peoples, require MNCs to respect indigenous peoples' rights. Finally, this paper aims to establish how the extraterritorial application of the EGD on European MNCs abroad would better actualise its intentions and reduce the growing cases of foreign direct liability in EU national courts.

V B: External Effects / Transfers & Accountability

Polluters by Proxy: International Corporations and Foreign States' Roles in Ecological Destruction in Brazil

Fernando Palazzo

Erasmus University Rotterdam & Ghent University

Recent climate reports indicate that carbon emissions keep increasing in all sectors, and the planet is at the beginning of an unprecedented climate crisis. In the midst of climate turmoil, mitigation measures have leaned heavily on preserving existing ecosystems in particular countries due to their territories' system critical biomes. In this regard, Brazil has been continually featured for its significant role, not only as the country hosting the majority of the Amazon rainforest, but also for many other intact but vulnerable and quickly deteriorating biomes located there. In order to properly assess environmental degradation in Brazil, it is essential to understand the historical processes shaping the country's current policies, and what endogenous and exogenous actors have influenced it. Brazil's colonial heritage plays a key role in comprehending the underlying scenario of its environmental exploitation. Currently, the exigencies of foreign states and transnational corporations mold the contours of Brazilian economic activity and environmental exploitation more than any domestic factor. In light of this international power dynamic, accounting for the pressures international actors exert on ecological destruction and pollution in Brazil is crucial to alleviating it. At the EU level, the European Green Deal and the EU Supply Chain Directive are stark examples of policies that oblige companies to manage social and environmental impacts along their entire value chain. Nevertheless, in order to achieve a more veridical accounting of environmental harms, it is necessary to consider the role of each player from the outset. By expanding the chain of causality to countries that are part of the ecological destruction in Brazil in the form of branches, shareholders, financiers, stakeholders, lobbyists, outsourced companies, contractors, etc., the veil that has concealed states in the Global North from liability will be removed. With the right hand often campaigning for rainforest protection with dedicated funds, acting as if no knowledge of what the left hand is doing with extractive state and corporate industries in Brazil, we develop the concept of polluters by proxy. These international polluters are responsible for on the ground pollution, even if their states or companies are at a geographical distance. At multiple points in the process of ecological destruction, these countries and corporations are drivers in the causality chain, but when it comes to assessing the accountability for pollution, the connections with these drivers' original countries are interrupted. There are many examples in Brazil encompassing this type of activity, and it will explore some remarkable cases involving some companies related to Norway, England, Australia, Germany, France, and other countries. In effect, this article examines the ambiguous relations between a sample of countries that claim to support environmentally friendly policies but profit and pollute by proxy without being held responsible for it. By removing this veil and exposing their actions through extended power, manufacturing, commodity, and demand analysis, accounting for environmental destruction places the majority of responsibility not with the winds of Brazilian politics, but with the drivers of international political economy in the Global North.

V B: External Effects / Transfers & Accountability

Exploring ways for the EU to regulate transnational investments in agricultural land for environmental and human rights protection

Eva-Maria Schatz

Helmholtz-Centre for Environmental Research - UFZ, Leipzig

Large-scale transboundary investments in agricultural land are globally on the rise. This development increasingly encroaches on human rights and the environment, especially in low-income countries. Investors gain control over large areas of farmland through purchase or long-term lease. This ensures a.e. the production of food and access to water and other resources. In addition, the land serves as object for investment and speculation. This approach is critically being referred to as 'land grabbing', as local land users often face displacement or lose access to land and resources. Affected human rights include, for example, the right to food, the right to water and other social, political and cultural rights. Moreover, the investment processes frequently result in massive environmental destruction as small-scale agriculture is replaced by large agribusinesses. Accordingly, direct investments in agricultural land need to be controlled, so the rights of local land users are safeguarded and the environment is protected.

Currently, transboundary investments in agricultural land are not sufficiently regulated. National law in the host countries is not effectively implemented, transnational regulatory approaches are only just emerging and comprehensive regulations on the part of the home states of investors are missing. As a result, the people and the environment in investment areas are left mostly without legal protection.

The EU can and should regulate foreign direct investments of its economic agents to prevent land grabbing in non-EU countries. This contribution will give a brief overview over current EU legislative initiatives that could address large-scale investments in agricultural land in third countries. It will further be analysed how these approaches could be complemented in order to achieve a stringent protection for human rights and the environment. This examination will also consider, how such a unilateral legislative initiative should be designed to be in line with European and international law. Existing soft-law instruments already set potential standards, specifically regarding time frames and the scale of investments (e.g. by recommending support only for small-scale investment).

This research is directly linked to multiple themes of the conference: Firstly, it provides one piece to the puzzle of a legislative framework for sustainable food systems and gives insights on current systemic obstacles for environmental and human rights protection. In this context it touches on recent legislative endeavours, as the EU proposals for a Directive on Corporate Sustainability Due Diligence and a Regulation on Deforestation-Free Products. Secondly, with the research objective being large-scale land investments, this work explores themes of green finance and how investments can be regulated for more sustainability. Lastly, it is related to the EU's responsibility for the impacts of the economic activities of its public and private actors beyond European borders.

V C: Biodiversity / Special Issues

Transnational Biodiversity Protection – A Legal Mystery

Carola Glinski

Copenhagen University

Nature and biodiversity are in a state of crisis, globally as well as in Europe. Main drivers of biodiversity loss – despite previous protection frameworks – are land use changes and the exploitation of natural resources, e.g. with unsustainable agricultural and forestry practices. Therefore, the European Green Deal has envisaged biodiversity protection as one of its core topics, which is further concretised in the Biodiversity Strategy, the Farm to Fork Strategy and the Forest Strategy. Additional Proposals for a Regulation on Nature Restoration, a Regulation on the Sustainable Use of Plant Protection Products, a Zero Pollution Action Plan or the new Deal for Pollinators show the complexity of the issue. These frameworks aim at a bundle of instruments, such as increasing protected and strictly protected areas, restoring and improving the health of ecosystems, increasing the quantity, quality and resilience of forests, adopting closer-to-nature-forestry practices, reducing pollution, bringing back pollinators to agricultural land, reducing the use and risk of pesticides and fertilisers, promoting agro-ecology, genetic diversity, and a new global standard on food sustainability.

As the main drivers of biodiversity loss are closely linked to international trade and transnational value chains, with more than 50 % of the EU's biodiversity footprint caused abroad, the EU aims at implementing the biodiversity provisions in all trade agreements and supply chain laws, while at the same time recognizing the need to maintain its security of supply. A prominent example is the current proposal for a Deforestation Regulation, which prohibits the placing on the market of cattle, cocoa, coffee, oil palm, soya

and wood that is not de-forestation-free, which means that it has been produced on land subject to deforestation after December 31, 2020, or that has been harvested in a way that has induced forest degradation. A further instrument is the proposal for a Directive on Corporate Sustainability Due Diligence which refers to the very general Art. 10(b) CBD, requiring the necessary measures related to the use of biological resources in order to avoid or minimize adverse impacts on biological diversity. However, it is far from clear which measures are 'inducing forest degradation' and which 'impacts on biological diversity' are 'adverse'.

Taking into account the broad set of approaches to be considered for biodiversity protection within Europe, the constraints inherent in supply chain approaches, the additional legitimacy challenges at the transnational level, the need for participatory decision-making in environmental matters, as well as the difficulties which the concretisation and implementation of previous supply chain laws such as the sustainability criteria of the Renewable Energy Directive or the requirements of the Timber Regulation have faced, the proposed paper discusses constraints, challenges, as well as potential avenues of how these requirements could be concretised and implemented in order to enable the achievement of effective, legitimate and coherent biodiversity protection requirements in European value chains.

V C: Biodiversity / Special Issues

The EU framework to address light pollution

Yana Yakushina

Gent University

In light of recently adopted policies, such as the EU Biodiversity Strategy for 2030 and the EU Zero Pollution plan, the EU and Member states have to strengthen the actions towards reducing the adverse impacts, leading to biodiversity decline. Additionally, recently adopted the 2022 Kunming-Montreal Global Biodiversity Framework indicates the need to address pollution from all the sources to the levels that are not harmful to biodiversity. Despite that the current EU policy framework aims at reduction of different environmental stressors, not all of them received due consideration. Light pollution is one such example.

Light pollution is an environmental problem which is caused by unwanted, misdirect or unnecessary artificial light at night (ALAN). During the past decade, light pollution has grown significantly approximately 10%, depending on a region. Research has broadly evidenced that an increased level of ALAN puts a great pressure on biodiversity and ecosystem in both terrestrial and aquatic environments. For instance, light pollution disturbs migratory routes and breeding patterns in birds and mammals. Moreover, high levels of ALAN can lead to a change of predator-prey relationships, causing significant decline in herbivore species. Furthermore, light pollution causes an “insect genocide”, subsequently affecting other species which depend on insects as a food source or pollinators. These research findings did not go unnoticed and have resulted in a gradual growth of political and legal recognition of the problem across various states within the EU and outside. However, at the EU level, there is currently no proper regulatory framework that is dedicated to the reduction of light pollution.

This article will explore the possibilities of the current EU environmental policy and legal framework to address newly emerged environmental driver - light pollution. It will help identify provisions that can be used for light pollution mitigation, as well as provide necessary recommendations based on best practices from other countries. Special attention will be given to the proposal of the Nature Restoration Law and its potential to consider nature darkness as a needed part for nature restoration. The conducted analysis will facilitate the EU action towards biodiversity conservation and nature protection by providing an additional focus on the environmental issue which cannot be longer ignored.

V C: Biodiversity / Special Issues

Hunting large carnivores under the current and proposed EU nature protection laws

Mar Ouro Del Olmo PhD

Uppsala University

This paper aims to assess the adaptive potential of the newly updated EU legislative framework for large carnivore conservation. Using the illustrative case study of 2023, Sweden's biggest wolf hunt in modern times, I intend to assess the adequacy of the Habitats Directive and of the proposed Nature Restoration Law to ensure that hunting policies stay inside legal boundaries that are informed by sound ecological knowledge. My hypothesis is that article 2 HD and the CJEU relevant case law, and specifically the Tapiola case, when read together, establish an epistemic framework with high adaptive potential in the light of scientific uncertainty, and that synergies with the proposed EU Regulation on Nature Restoration in terms of area-based protection can strengthen aspects of large carnivore conservation that have been, arguably, more neglected in the Directive. In this sense, the proposed Restoration Law could boost environmental compliance with regards to the designation of protected areas for wolves, which are currently absent in Sweden despite clear legal obligations. Moreover, this study explores the capabilities of this new Biodiversity Strategy to revive the ongoing, yet rather stalled, infringement proceeding of the Commission against Sweden regarding its wolf legal regime, and how is the Restoration Law going to operationalize ecosystem restoration with regards to apex predators and its specific needs for the Scandinavian case at hand.

My conclusions point to the unleashed potential of the Habitats Directive when read in conjunction with the CJEU relevant case law, and to the promising, yet still unclear, synergies that these can have when articulated with the more holistic provisions of the proposed EU Regulation. The correlation of these two pieces of legislation can broaden the narrow epistemic standards of species-specific protection that have prevailed in large carnivore conservation, yet a broader legislative landscape can also dilute the still fragile legal status of this highly controversial species. The political priorities set by the Biodiversity Strategy will play an important role in articulating the eventual outcome. The choice of the Swedish wolf for the case study will allow me to deepen into the role that law and science play in convoluted political scenarios that challenge the rigidity (or flexibility) of legal systems, which is when the strength of European law is more severely tested.

VI A: Climate & Energy / Forests and Bioenergy

Sustainable Forest Use and Protection under the Revised EU's Renewable Energy Directive (RED III) – Identifying Shortcomings and Legal Solutions to Overcome Them

Jessica Stubenrauch

UFZ Helmholtz Centre for Environmental Research

Under the European Green Deal (EGD) the EU strives to be the first climate-neutral continent by 2050 and to reduce net greenhouse gas emissions by at least 55% by 2030, to plant 3 billion additional trees and to increase the resilience and biodiversity of existing forest ecosystems at the same time. Forests are positioned as key element to reach the envisaged targets of the EGD. They have an indispensable value for global climate and biodiversity protection and are important suppliers of raw materials in a post-fossil world. In this context, the revised EU Renewable Energy Directive (RED III) seeks to promote the use of energy from renewable resources in the EU. Currently, biomass provides about two-thirds of Europe's annual renewable energy production, with woody biomass accounting for the largest share. However, without effective legal restrictions, the increasing demand for woody biomass for energy production might counteract forest protection in Europe and third countries, thus undermining international climate and biodiversity targets.

VI A: Climate & Energy – Forestry and Bioenergy

Forest protection and bioenergy: friends or foe? An analysis of the EU nature protection legislation and renewable energy legislation

Elisa Cavallin

Hasselt University

Bioenergy is believed to have a role in meeting the international and European Union's (EU) climate targets as biomass is considered one of the few alternatives to fossil fuel feedstock, especially in certain sectors. Forestry biomass already plays a role in decarbonisation: a large amount of forestry biomass is being used, in addition to other types of biomass, to produce bioenergy. This creates issues from a biodiversity and ecosystems preservation perspective and has given rise to social, policy and legal debates on how to achieve an equilibrium between essential ecological and societal needs.

A first excellent strategy to reduce the impact of biomass production and bioenergy on forests lies in proper consideration and implementation of EU nature protection legislation in forest management. More specifically, the establishment of new protected areas and a thoughtful application of Article 6 of the Habitats Directive can be instrumental for forest protection and the regulation of human activities in protected areas.

However, the new twin challenges of climate change and biodiversity loss also call for additional action: an ambitious Nature Restoration Law that can complement the existing nature protection framework. For forest protection and management, particularly interesting are Articles 4, 10 and 11 of the Proposal.

The second complementary approach resides in formally acknowledging the impact of the Renewable Energy Directive on forest ecosystems and builds on the full consideration and implementation of the principles of the circular (bio)economy in the renewable energy legislation. In particular, the circular use of wood and wood products and prioritisation of the use of forestry waste and residues for bioenergy within certain parameters are of vital importance in the pursuit of a genuinely sustainable and future-oriented energy transition.

Against such a backdrop, this contribution intends to show that forest protection and bioenergy are not intrinsically incompatible: with robust nature protection legislation and strict biomass criteria in the renewable energy legislation, bioenergy and forest protection can function in a concerted way to achieve decarbonisation objectives. In particular, this requires legislative adjustments and the consideration of crucial elements that could help create and nurture intelligent biomass pathways and achieve synergetic and effective legislation and its coherent and harmonised implementation and application across the EU.

Additionally, given the significant level of activity at the EU level on these topics, the analysis will cover the latest legislative developments, including updates on the Nature Restoration Law and the Renewable Energy Directive.

Given its equal pertinence to both nature protection legislation and energy legislation, this contribution finds itself on the cusp of two of the Conference's overarching themes: "climate Governance and EGD energy policy – in the face of the energy crisis" and "biodiversity, nature conservation and agriculture". Moreover, due to the crucial importance and role of the principles of the circular bioeconomy, the paper also touches upon the theme "Green industry & circular economy"

VI B: Overarching - Just Transition

Inequalities and environmental justice in the European Green Deal

Chiara Armeni

ULB

The climate crisis shapes and is shaped by inequalities. This nexus takes the justice implications of tackling the crisis at the forefront of the European agenda. The 2019 European Green Deal (EGD) sets the direction for achieving the EU's climate neutrality target enshrined in the European Climate Law while 'ensuring that no one is left behind'. Against this background, this paper explores inequalities, environmental justice and the just transition as overarching aspects of the EGD (topic A). In a first section, it discusses the inequalities arising from the implementation of the EGD, focusing on inequalities within member states and societies. It then explores the instruments available to foster environmental justice, in particular through the implementation of the EU just transition framework and sectorial just transition provisions in the Fit for 55 package. Through this analysis of moments for environmental justice in the implementation of the EDG, the paper is ultimately concerned with whether the legal and regulatory framework implementing the EGD effectively contributes to environmental justice by reducing inequalities to achieve a just socio-ecological transition.

VI B: Overarching - Just Transition

‘Just transition’ as a new overarching law concept in the climate change debate?

Hana Müllerová

Institute of State and Law, Czech Academy of Sciences

The just transition concept, although having originated in the labour movement in the U.S., is increasingly invoked in public discussion about climate change solutions, especially about shifting away from fossil fuels and decarbonising the economy. It makes part of a larger sustainability narrative on just, equitable and politically smooth low-carbon transitions. In international law, the concept of just transition is beginning to appear in the international climate law instruments, albeit so far in a soft law form only. It for example features in the preamble to the Paris Agreement. The just transition has not yet a have a recognised definition in law; it can be described as an imperative guiding governments and regional authorities during the transformation of the economy, having the value of ‘justice’ at its heart. It requires that the design and implementation of climate targets, policies and measures appreciate equity and fairness for people or communities whose livelihoods may be disrupted by decarbonisation processes, and prevent the exacerbation of inequalities. The essence of the just transition is formed by human rights and law principles that serve as thresholds and important criteria of the ‘justice’ of the whole process.

The concept of just transition, if further developed and embedded in law documents, could have more potential within the climate debate than to make one of its leading guidelines. In my paper, I will first attempt to outline the just transition as a law concept. Based on the previous research on the concept of just transition in other disciplines of social sciences, and on the concept’s appearance in international climate law instruments and law literature, I will seek to determine its position and content in law. Then I will consider whether the just transition could serve as a possible future concept framing climate action. This new approach could surpass the current attitude built on ‘climate protection’, which may appear less appropriate. It increasingly seems that the only solution to climate crisis is a far-reaching transformation of the society, which will range from re-designing of the energy mix in countries up to re-motivating the everyday behaviour of individuals. The continued conceptualisation of solutions in the current notion of ‘climate protection’ may be too narrow to capture the complex nature of the necessary transformation. The ‘just transition’ could prove to be a more suitable conceptual frame for this unprecedented challenge, bringing attention to the opportunities and wide participation in modelling the shape of the low-carbon society, instead of the less attractive self-limiting demands of the ‘climate protection’ viewpoint.

My topic will help to show how law can react to the developments in society not only by creating new detailed regulations, but also at the level of concepts and principles, where it offers new frameworks in response to the need for social transformation in a matter as urgent as climate change.

VI C: Circular Economy / Mining & Critical Resources

The European Green Deal and Polycentric Conflicts: The Case of Rare Minerals

Sanja Bogojevic

The European Green Deal (EGD) seeks to 'transform the EU's economy' and make Europe the first climate-neutral continent by 2050. A key commitment in this regard is to phase out coal but the EGD, however, does not rule out mining-activities altogether. On the contrary, it encourages what could be labelled as 'green' mining – the extraction of raw materials needed for the realisation of a net-zero economy. As per the 2022 State of the European Union address: 'without secure and sustainable access to the necessary raw materials, our ambition to become the first climate neutral continent is at risk'. Recent scholarly findings from the United States, Australia and Canada, however, show that mining for these minerals could be even more disruptive to demographic systems than the coal phase-out. Similar reporting is emerging also in Europe. In 2022, for example, UN-appointed experts warned the Swedish government that a planned iron-ore mining project deemed necessary for a fossil-free infrastructure poses 'irreversible risks' to lands used by the indigenous Sami community, and urged the Swedish government to block it. More recently, in January 2023, 'Europe's largest deposit of rare earth minerals' was found in the Kiruna area – a region with a long Sami history, which group is reported to face 'an existential threat from the mining activities billed as a pivotal shift towards the EU's green transition'. Plans to extract lithium, another critical mineral, caused a riot in Serbia; and similar stories of local resistance to lithium mining across the EU have been reported. This includes Portugal, where injunctions are expected to be filed against a plan for the extraction of lithium which was green-lighted by the Environment Ministry. Looking further afield, recent reports have sounded the alarm on the EGD-fuelled demand for critical minerals, which is said to risk 'accelerating environmental devastation, compounding climate disruptions, and importing Europe's carbon emissions' in Africa. In this paper, a conceptual framework is provided to better understand these conflicts as 'polycentric' and approaches how best to address these are outlined.

VI C: Circular Economy / Mining & Critical Resources

Barking at the wrong tree? The mismatch between the EU policies and legislation on critical raw materials

Topi Turunen

Finnish Environment Institute

Critical raw materials (CRMs) are important for many different uses – they are highly relevant for e.g. advanced battery technologies, fuel cells and robotics. Currently, the EU is not self-sufficient in CRMs and its industry is dependent on the importation of CRMs from e.g. China and Russia. Increasing geopolitical instability has increased the need to improve CRM self-sufficiency in Europe. One way to address this is to create a secondary stock of CRMs via more efficient recovery. However, the recovery rate for most CRMs remains extremely low. This study examines the EU policies on CRM management and assesses whether they have been implemented into EU legislation. The study consists of three main parts: 1) Identifying CRM-related objectives that are laid down in the EU policy documents, 2) systematization of legal instruments concerning CRMs management and identification of shortcomings in the regulatory framework and 3) analysis of the new EU CRMs Act (2023) and how it addresses the identified shortcomings.

The EU policy review showed that in the last 15 years CRMs have emerged as an important policy topic across different policy areas, including circular economy, clean mobility, batteries and industrial policy. There appears to be a consensus about the paramount importance for measures that address domestic market creation for extraction- and recycling- based measures in Europe. The objectives across different policy fields are coherent in promoting secondary raw materials markets, resource efficiency and circular economy to reduce dependency on importation. The policy documents suggest that the objectives could be promoted through addressing the legal frameworks eco-design, batteries and waste. Proposed legal instruments include recycling targets, mandatory recycled material content targets and addressing recyclability of products.

Despite the quite coherent objectives laid down in the policy document, the regulation on CRMs is scattered and the secondary stocks of many CRMs remain mostly unregulated. The regulation on most CRMs focuses on trade, tariffs, custom duties and product safety. There are only few instruments directly supporting the recovery of CRMs. Directives on waste electronics and batteries have some provisions (overall collection and recycling targets) promoting more efficient recovery of CRMs. Moreover, CRMs are also quite vaguely mentioned in some product group specific ecodesign criteria. The proposed Batteries Regulation lays down the first direct obligations for the recovery of CRMs: Binding recycling targets and minimum recycled content requirements are laid down for cobalt and lithium. The proposed regulation therefore enacts the first recycling targets that are not merely weight-based but take into account the different materials in the respective waste stream.

Finally, the study assesses how EU's new CRMs Act (2023) aims to address the mismatch between EU CRM-related policy documents and the EU legislation on the matter. The CRMs Act including a Commission Communication (COM (2023) 165 final) and a Proposal for new Regulation establishing a framework for ensuring a secure and sustainable supply of CRMs (COM (2023) 160 final) was published in March 2023.

VI D: Cross-Cutting Issues

Exploring the legal landscape for land-use based CDR measures: Insights from the German context

Romina Schaller; Till Markus; Klaas Korte; Erik Gawel

UFZ Helmholtz Centre for Environmental Research

Climate protection has become a crucial aspect of the international and national political agenda. The European Union has committed itself to reducing net greenhouse gas emissions by 55% by 2030 and achieving climate neutrality by 2050. In line with these objectives, Germany has amended its Climate Protection Act to achieve climate neutrality by 2045. The promotion of carbon capture and storage in plants and soil is crucial for achieving these objectives, however, "hard-to-abate" emissions from certain activities such as agriculture continue to pose significant challenges. According to the Federal Environment Agency, agriculture in Germany accounts for approximately 7.3% of total greenhouse gas emissions. Excessive land use through agricultural activities and overgrazing can lead to a reduction of carbon storage in soils, which reduces their sequestration and storage capacity.

To address these issues, agricultural practices that enhance soil carbon sequestration (land-use based CDR measures) can contribute to climate protection. Moreover, if an ecosystem services approach is applied, the environmental benefits of these measures would be complemented by economic and social benefits. In this regard, Germany has been adopting (new) strategies, financing and regulatory measures to support the adoption of these land-use-based RCD measures. However, the choice of which land-use-based CDR measure(s) to implement depends on the attractiveness of the instruments to decision-makers.

This presentation will provide a brief introduction to the land-use based CDR measures and identify gaps, inconsistencies, and implementation deficiencies in the German legal framework that may influence local decisions for or against the implementation of these measures. The talk aims to provide information and promote discussion on the legal aspects to be considered for an implementation of the aforementioned CDR options.

VI D: Cross-Cutting Issues

Towards Climate-Neutral Land Sector by 2035 – The Role & Relevance of the Revised LULUCF Regulation

Seita Romppanen

University of Eastern Finland

The inclusion of the land use sector within the EU's climate law framework in 2018 was a major step forward in establishing a holistic climate policy for Europe. Today, the land use, land use change and forestry ('LULUCF') Regulation is an integral component of the dynamic EU climate and energy framework. The Fit for 55 package of July 2021 introduced several revisions to the LULUCF Regulation, including a commitment to increase the EU's carbon sinks to levels above 300 million tonnes of CO₂, equivalent by 2030. These removals are to be distributed as binding targets for Member States to increase their net carbon removals in the land use and forestry sector for the period from 2026 to 2030 and to significantly simplify compliance rules. The Commission also proposes moving towards a more integrated policy framework covering activities related to agriculture, forestry, and land use, under one climate policy tool beyond 2030. Through the proposed changes, the EU aims towards a climate-neutral land sector by 2035 (i.e. land sector defined as LULUCF sector combined with non-CO₂ agricultural sector).

Overall, the proposal for the LULUCF Regulation acknowledges the fundamental contribution of land and forests in the EU's transition to climate neutrality. However, there are also clear challenges that lay ahead which may weaken the integrity of the final Regulation if they are not adequately considered and acted upon in the legislative process. The presentation at the EELF 2023 would critically analyse the most important proposed revisions to the LULUCF Regulation, or the revised LULUCF Regulation (if available by the time), against the broader context of EU climate law and policy as well as discuss the role and relevance of the LULUCF sector in the dynamic context of the rapidly developing climate and energy framework in the EU, and beyond.