XII Interdisciplinary Seminar on Climate, Energy and Sustainability

22 September 2023

9.30 – 11.30 CEST

Room 7A.0.16 – Faculty of Law, University of Copenhagen

PROGRAMME

Time	Programme
9.20 – 9.30	In person: welcoming of speakers and participants (breakfast is served) Online: ZOOM room opens
9.30 – 9.40	**Welcome and Introduction** **Associate Professor Emmanuel Raju**, Copenhagen Center for Disaster Research (COPE), Department of Public Health, University of Copenhagen
9.40 – 10.30	**Session 1** **Chair: Pernille Holten Poulsen**, PhD Fellow, Centre for International Law and Governance (CILG), Faculty of Law, University of Copenhagen 1. **Christos Zois**, Graduate Student, Geneva Graduate Institute *Enhancing Ecosystem Protection via the Recognition of Substantive and Procedural Rights of Nature: global and regional perspectives with projections to International Legal Personality theories* 2. **Carlos Antonio Cruz Carrillo**, PhD Fellow, University of Basel *The expansion of ocean renewable energy in the EEZ: a quest for balancing interests under the law of the sea* 3. **Alexandru Gociu**, PhD Fellow, School of Law, Trinity College Dublin *Hydropower, Sustainability and Economic Rent- The Norwegian Version*

10.30 – 11.20	**Session 2** **Chair: Viktor Weber**, Postdoc, Centre for International Law and Governance (CILG), Faculty of Law, University of Copenhagen 1. **Federica Montanaro**, PhD Fellow, Sant'Anna School of Advanced Studies – Pisa *Greening the EU Market Corporate Sustainability Initiatives and the Climate Crisis* 2. **Radhika Verma**, MRes Student, University of Glasgow *Implications of decarbonisation policies particularly EU ETS on the network design of shipping companies* 3. **Živa Šuta**, Junior Researcher, Faculty of Law, University of Maribor *Ecologically-sustainable servitization from an EU law perspective*
11.20 – 11.30	**Concluding Remarks** **Associate Professor Emmanuel Raju**, Copenhagen Center for Disaster Research (COPE), Department of Public Health, University of Copenhagen

ABSTRACTS

Christos Zois, Graduate Student, Geneva Graduate Institute

Rethinking international environmental law's subject: The Rights of Nature legal movementand its projections to international legal personality theories on global and regional levels

With the Cartesian/Kantian distinction between matter and mind enshrined in its normative foundations, is contemporary international environmental law suitable to address the continuous environmental deterioration or is it deemed to perpetuate species chauvinism? Against this question, the paper examines the gradually evolving legal movement on Rights of Nature and its doctrinal, normative, and critical interactions with international legal personality theories on global and regional levels. The thesis first discusses the philosophical impetus of posthuman new materialistic and eco-centric approaches of nature as a vibrant agent/subject. It then explores whether nature's subjecthood could find a normative place within both traditional and critical international legal personality theories, with a special focus on the Hohfeldian construction of personality through right-bearing.

On the substantive level, the thesis elucidates the constantly growing prominence of nature's interests and intrinsic value within international governance, by expanding on both international environmental and human rights hard and soft law instruments. In this regard, we juxtapose how various international, regional, and national legal systems, both open and close-ended, enhance the legal protection of nature *qua nature* regardless of its utility for humans. Finally, a brief mention to the procedural means through which nature's interests can access (international) justice will be made.

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Carlos Antonio Cruz Carrillo, PhD Fellow, University of Basel

The expansion of ocean renewable energy in the EEZ: a quest for balancing interests under the law of the sea

Ocean renewable energy is increasing as a mitigation and adaptation measure against climate change and as an alternative to achieve energy security in light of the current geopolitical context. The technology to produce ocean renewable energy includes offshore wind farms, solar panels and innovative devices - such as kites and carpets - capable of obtaining energy from waves and tides. The expansion of ocean renewable energy happens when the ocean is significantly bursting with multiple stakeholders and activities. Under the law of the sea, coastal states have sovereign rights to carry out ocean renewable energy activities in their exclusive economic zone (EEZ), the maritime area where most of this activity happens. However, coastal states are obliged to have due regard to other states' interests in the EEZ, such as navigation or the installation of cables and pipelines. A clear understanding and efficient implementation of the due regard obligation is crucial to ensure the proper operation of ocean renewable energy projects. The question then

arises as to what this obligation entails in practice and how it applies to the particular context of ocean renewable energy. This research addresses this question in three parts: (i) it explains the main benefits and challenges of operating ocean renewable energy; (ii) it explains the scope and content of the due regard obligation in the EEZ; (iii) it explores how the due regard obligation applies to the particular context of ocean renewable energy.

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Alexandru Gociu, PhD Fellow, School of Law, Trinity College Dublin

After gaining independence in 1905, the Norwegian industrial potential was disproportionally higher than the available domestic capital to develop it, thus Norway faced the issue of foreign interests controlling the exploitation of natural resources, especially hydropower. This was perceived as the main threat by Norwegians, who greatly feared the foreign capitalists aiming at controlling and buying the Norwegian mines, waterfalls and power stations because a foreign controlled resource was considered as being the precursor of the industrial feudalism at that time.

As a consequence an innovative regulatory framework was devised in the form of the first concession laws (konsesjonslovene also known as panic-laws or panikklover) in 1906, which aimed at keeping the natural resources in the Norwegian State's property. These were extended with the Act No 4 of 18 September 1909 Relating to Acquisition of Waterfalls, Mines and Other Real Property which introduced the reversion system and in 1917, Industrial Concession Act was enacted taking the place of the 1909 Act and eliminating the discrimination between foreign and Norwegian private actors. The system, updated and modified is still in place today in Norway.

For waterfalls and rapids above 1000 horsepower a strict and complicated concession process was mandatory. The duration of the concession was not less than sixty years and not more than eighty years, after which the waterfalls or rapids along with the power plant, piping, dams, water mains and everything associated becomes the property of the Norwegian state without the right to any compensation. Therefore, the law introduced and developed the concept of reversion system - essentially the rule that mines and waterfalls can be leased only for a limited time span, after which the resources along everything associated and all improvements returned to the state. The reversion system was designed to preclude the creation of monopolies controlled by foreign investors.

The system encouraged investment and innovation in industries such as fishing, forestry, and mining, leading to significant economic growth and development being designed in a way that Norway's natural resources will be used in a sustainable and responsible manner, protecting the environment as much as possible for future generations.

The Norwegian concession laws were, according to Norwegians, the right remedy to deal with the foreign companies determined to exploit other countries' natural resources. By enacting such a legal frame the Norwegian state designed to ensure a tight national control over its natural resources and confront powerful foreign interests. This experience proved to be useful later when oil will be discovered and the petroleum regulatory framework that ensued was based essentially on the same principles. In the middle 1960s the Norwegians had the opportunity reap the fruits of the hydropower concession system as most of the hydropower plants were the state's hand, with the economic rent being collected and the state exercising a strong control on the matter.

One hypothesis regarding the Norwegian approach is David Ricardo's concept of "economic rent" and that the concession system itself was built on ideas of Henry George, who reinterpreted David Ricardo's theory in a book published in 1879, "Progress and Poverty". The main idea was that any gain or "rent" obtained by using natural resources should benefit the whole society. While there no explicit reference to such political economy concepts in the Norwegian regulatory framework regarding natural resources the application of it is could be inferred from various sources.

After analyzing the Norwegian regulatory solutions aimed at sustaining development but also preserving natural resources for future generations, all this in the context of the strong nationalism that dominated the Norwegian political arena after acquiring independence, the a question arise regarding what was the theoretical basis present in a constant and coherent manner in all pieces of legislation regarding natural resources? This paper addresses also to what extent the Norwegians created an original system where theory of economics and nationalist constitutional principles are intertwined in a new and original approach? Moreover it is discussed to what extent a coherent legal philosophy originating from the Norwegian hydropower regulatory framework focused on sustainability was at the foundation of the Norwegian petroleum regulatory framework and of the enactment in 1992 of article 112 (former Article 110b) of the Norwegian constitution and to what extent the experience in hydropower influenced the quest for sustainability?

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Federica Montanaro, PhD Fellow, Sant'Anna School of Advanced Studies – Pisa

Greening the EU Market Corporate Sustainability Initiatives and the Climate Crisis

Currently, the pressing concern of the climate crisis looms large, demanding immediate action. In Europe, the European Green Deal (EGD) marks a significant stride towards a holistic strategy in combatting this crisis, constituting a comprehensive intervention that spans various sectors.

Since the systemic and strongly economy based origins of the climate crisis, a key point to measure the potential efficacy of EGD is represented by the provisions directly impacting the economy, finance, and common market. Notably, the role of corporations, particularly major ones, stands as a pivotal juncture in influencing the scale and nature of systemic transformation. Sustainability could constitute a sort of benchmark to measure the extent and efficacy of EGD,

starting from 2019 Communication. Since it's not possible to reshape or even to modify in the long run the equilibrium between the economic and ecologic formant without taking into consideration the structure of productive activities and money flows, an evaluation of EGD adopting sustainability as a parameter must focus on how the norms translate this aim of a new balance between economic and ecological framework.

In this context, Corporate Sustainability Reporting Directive emerges as a highly impactful intervention. This directive furnishes a binding framework that could serve as a foundation for fostering sustainable corporate governance throughout the EU market. Furthermore, directing attention to corporations and their supply chains, the Proposal for the Corporate Sustainability Due Diligence Directive and the Regulation on Deforestation free Supply Chains assume vital importance too. Investigating which concept of sustainability Eu institutions are shaping with this intervention and how they are implementing it starts within the legal framework, but can go further, suggesting what political vision and which role the EU wants to play in the global scenario regarding the new industrial and economic politics.

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Radhika Verma, MRes Student, University of Glasgow

Implications of decarbonisation policies particularly EU ETS on the network design of shipping companies

In today's time, one of the most pressing issues faced by the world is the problem of climate change and global warming, mainly due to the rapidly increasing carbon dioxide. Further, with the increase in international trade, marine sector is one of the major emitters of greenhouse gases. Hence, in the near future it is necessary that there is considerable reduction in greenhouse gas emissions in the shipping sector. Recently, the European Union has included maritime sector in their ETS scheme where shippers would be required to pay for the emissions in the European Economic Area. This study focusses on the implications of European Union Emission Trading System (EU ETS) regulations on the shipping sector and the charter parties by theoretical integration of "John Elkington's triple bottom line theory" and "Economic Impact Analysis". In this era of environmental responsibility of business, this poses a fundamental challenge that needs to be resolved for the successful implementation of decarbonization process. Thus, this study aims to answer the question of how will shipping companies redesign their network for cost-efficiency, with the introduction of EU ETS directives. Further, the guidelines of EU ETS are expected to generate costs for both the shipping company and charterer and the big question that needs to be can there be a trade-off where the cost of reducing carbon emissions is shared by both the shipping company and the charterer so that a just transition towards the net zero goal is achievable? Although various studies have studied the GHG emissions by maritime sector, but limited research is available on how the rising carbon cost would impact the various parties involved in the supply network and what will be the role and liability of each party towards the net zero goal. As a first step in this research, a pilot study is conducted to understand with the introduction of EU ETS guidelines for marine sector, how shipping companies would redesign their network? and whether they would avoid the European Economic Area (EEA) routes for

cost effectiveness? For this first study, quantitative data analysis is conducted where specific ship voyages are studied to understand the cost incurred and various ship parameters like speed, vessel size, ETS pricing and port distance are evaluated. With the implementation of regional decarbonisation policies like EU ETS it becomes necessary to understand the strategies adopted by the companies to avoid the additional compliance cost. And the easiest option available with the shipping companies to achieve this is to redesign their network particularly routing and scheduling where either the EU ports are replaced by non-EU ports or new ports are added to reduce the length of the voyage in the EEA. The findings of this study suggests that there is potential for evasive behaviour among the shipping companies to avoid the additional compliance cost payable for voyages within EEA. Clearly, if measures are not taken to discourage the evasive behaviour then in the long run it will have significant impact on the entire shipping network particularly for the small ports and small sized shipping firms with less competitive advantage. Thus, it becomes necessary to study how this transition is taking place in the maritime sector with due consideration to all the three pillars "people, planet and profits".

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Živa Šuta, Junior Researcher, Faculty of Law, University of Maribor

Environmentally sustainable servitization from an EU law perspective

Servitization illustrates an economic megatrend of adding value to the offering by combining products and services. Examples of such include car or washing machine sharing, smart houses and different subscription models. At the heart of servitization is the creation of a more sustainable economy, as adding services to products can increase their lifetime, reduce the amount of materials needed and improve waste management, which is also linked to social sustainability. The underlying idea of sustainable servitization lies in the interest of service providers to ensure product durability, which may be accomplished by providing high-quality, long-lasting products that can be easily returned, repaired, refurbished, and recycled at the end of their lifespan. This presentation begins by asking whether any form of servitization is socially and environmentally sustainable, and moves on to propose institutional and legal alternatives, based on the analysis of existing soft and hard EU law and case studies, with the goal of developing a cohesive and harmonised EU legal framework for a sustainable Europe. It can be observed that sustainable servitization is premised upon the motivation of consumers and business owners to align servitization and sustainability and that the existing, relatively flexible legal framework lacks the safeguards needed to advance this trend.