UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

School of Law
Scoil an Dlí

11th Postgraduate Research Symposium on Environmental Law

Wednesday, 10th April 2019,
Room AL G.18
Áras na Laoi,
University College Cork

11th Postgraduate Research Symposium on Environmental Law

Programme

9.20 am Welcome and Opening Remarks.

Environmental Litigation and Judicial Engagement

9.30 am Masrur Salekin, Hardiman Scholar, Ph.D. Candidate, School of Law National University of Ireland Galway:
'Ensuring Environmental Justice through Judicial Activism.'

10.00 am Congwen Yao, Ph.D. Candidate Wuhan University / University of Ghent:
'Research of General Environmental Duty of Care: Experiences from Australian Environmental Law.'

Environmental Governance and Regulation

10.30 am Margaret Savage, Ph.D. Candidate, School of Law, University of Manchester: 'Environmental Regulatory Awareness in Irish SMEs.'

11.00 am Sahara Nankan, PhD Hardiman Scholar, Irish Centre for Human Rights, National University of Ireland Galway:
'The Critical Interface between SDG 5 "Gender Equality" and SDG 6 "Sustainable Water and Sanitation for All": A Focus on Women's Participatory Justice from an Environmental Human Rights Perspective—Questions of Structure.'

11.30 am Lenka Hlaváčová, Ph.D. Candidate. Faculty of Law, Charles University Prague: 'Achieving Effective Public Participation in Environmental Decision-Making Processes: The Example of the Czech Republic.'

Climate and Energy

12.00 pm Clodagh Daly, Ph.D. Candidate, Sutherland School of Law, University College Dublin:
'Leading the Way to a Clean Energy Future? Evaluating the Electricity Supply Board's Continued Reliance on Colombian Coal.'

12.30 pm Godswill Agbaitoro, Ph.D. Candidate, School of Law, University of Essex:
'Legal Challenges in the Transition to Renewable Energy: Possible Solutions.'

1.00 pm Lunch

Biodiversity, Habitats and Living Resources

2.00 pm Laurie O'Keefe, Ph.D. Candidate, School of Law, University College Cork:
'Assessing the Effectiveness of Sea-Fisheries Law: A Practitioner Perspective'

2.30 pm Alena Chaloupková, Ph.D. Candidate, Faculty of Law, Charles University Prague:
'Legal Aspects of Habitat Fragmentation Caused by Roads in the Czech Republic'

3.00 pm Sarah Enright, Ph.D. Candidate, School of Law / MaREI, University College Cork:
'Marine Protected Areas: Effective Conservation or Paper Parks? The Challenge to Achieve Meaningful Protection of Marine Biodiversity'

Sustainable Production, Waste, and the Circular Economy

3.30 pm Edwin Alblas, Ph.D. Candidate, Sutherland School of Law, University College Dublin:
'Promoting Agri-Environmental Farming Practices: The Case of Environmental Cooperatives in the Netherlands'

4.00 pm Charlotte Bishop and Luke McGivern, LL.M. (Environmental & Natural Resources Law), University College Cork:
'It's Rubbish! Ireland's Waste Collection Sector: An Examination of Environmental Impacts and the Potential Legal Implications of Re-municipalisation'

4.30 pm Michael Boland, Ph.D. Candidate, School of Law, University College Cork:
'Using the "Cradle to Cradle" Framework to Build a Circular Economy'

5.00pm Concluding Remarks and Close of Symposium

Abstracts

Masrur Salekin, Hardiman Scholar, Ph.D. Candidate, School of Law National University of Ireland Galway:

Ensuring Environmental Justice through Judicial Activism.

The Irish Constitution provides a number of fundamental rights from Article 40 to 44. Apart from these enumerated rights, there are certain unenumerated rights which have been identified and articulated by the Irish courts in several cases.[1] According to the doctrine of hierarchy of rights which was expressly acknowledged by the Supreme Court in *The People (Director of Public Prosecutions) v Shaw*,[2] enumerated rights carry more weight than unenumerated rights. In *Balmer v Minister for Justice and Equality*[3] O'Donnell J stated that 'It is also strange if an unenumerated personal right under Article 40.3 may be weighed as more valuable than a right specifically enumerated in the Constitution'.

The doctrine of unenumerated rights was one of the most influential doctrines in Irish constitutional law in the twentieth century but drifted out of favor and the Irish Judiciary has been very restrained in the last twenty years in recognizing any new right. The open-ended nature of the doctrine has been criticized by judges, academics, and constitutional lawyers. The natural law theory mentioned by Kenny J in the seminal judgment of Ryan v Attorney General[4] and followed in a number of decisions has also been criticised in the judicial decisions in recent years. *In this era of judicial restraint*, the right to the environment was recognized as an unenumerated right by the Court

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[1] Right to bodily integrity: Ryan v Attorney General [1965] IR 294;
Right of access to the courts: Macauley v Minister for Posts and Telegraphs [1966] IR 345;
Right to travel: State (M) v Attorney General [1969] IR 73;
Right to marital privacy: McGee v Attorney General [1974] IR 284;
A generic right to privacy: Kennedy v Ireland [1987] IR 587;
Right not to have one's health endangered: State (C) v Frawley [1976] IR 365;
Right to earn a livelihood: Murtagh Properties v Cleary [1972] IR 330;
Right to communication: Attorney General v Paperlink LTD. [1984] ILRM 373;
Right to environment: FIE v Finegal County Council [2017]
Right to fair procedures: Re Haughey [1971] I.R. 217;
Rights of an unmarried mother vis-à-vis her child: The State (Nicolaou) v An Bord Uchtála [1966] IR 567;
Right to state-funded legal representation in criminal trials: The State (Healy) v Donoghue [1976] I.R. 325.

[2] [1982] IR 1.

[3] [2016] IESC 25

[4] [1965] IR 294

in *Friends of the Irish Environment CLG v Fingal County Council & Ors.*[5] This judgment may mark the beginning of a jurisprudential shift in Irish constitutional law.

Setting out the background, this paper examines whether the right to the environment withstands critiques and can overcome the tests of potential dangers lurking in the unenumerated rights jurisprudence, which includes the test of constitutionality especially the doctrine of separation of powers, non-dependency on natural law theory, establishing that the personal rights provisions of Article 40.3 are non-dead letters and the right to environment is supported by other constitutional provisions apart from Article 40.3. This paper also tests the doctrines of 'hierarchy of rights' and 'no hierarchy of rights' using the right to the environment with the goal to debate whether a hierarchy should be adopted between the right to environment and other fundamental rights. The paper will conclude by proposing how to balance between the competing rights if there is a conflict between enumerated and unenumerated rights.

Congwen Yao, Ph.D. Candidate Wuhan University / University of Ghent:

Research of General Environmental Duty of Care: Experiences from Australian Environmental Law.

Duty of care is a common law concept that serves a valuable foundation in the law of negligence. Though some scholars show skepticism to duty of care arguing it obscures the understanding of negligence law and hindering its rational development, it has been the subject of extensive judicial analysis and academic discourse for much of the last century. Moreover, this common law concept has been extended to the realm of environmental statutory law in England waste management law and South Africa environmental protection legislation.

In Australia, particularly, a statutory duty of care to the environment was first mentioned by Binning and Young (1997) and subsequently proposed by the Industry Commission (1998) as a complementary approach to the concept of *ecological sustainable development*. Since then, there has been an ongoing debate about "duty of care" instrument in the regulatory and policy discussion on natural resource management and environmental protection, such as land

[5] [2017] IEHC 695.

management and biodiversity protection. Until now, a few states in Australia have included an environmental duty of care in environmental protection acts and other resources management acts. In June 2018, Victorian Parliament passed an Environmental Protection Amendment Act to overhaul the Environmental Protection Act (1970). One of the most significant changes introduced by this new Act is the *general environmental duty* (GED)which requires any person who is engaging in an activity that may give rise to risks or harm to human health or the environment to either eliminate or minimizes those risks.

This research will start with a brief historical exploration of the concept of duty of care to trace its common law origins. A literature review on Australian environment law scholars' academic work on environmental duty of care will be conducted to demonstrate the evolvement of environmental duty of care concept. Then it will compare the *common law duty of care* with a *statutory duty of care to the environment* that developed and stipulated in relevant Australian environmental law to delineate the major differences between these two concepts. Key relevant environmental legislation in different Australian states will be looked into to analyze the internal built-in of an environmental duty of care, such as *environmental harm*, *reasonable and practical measures*, with the particular emphasis on the new Victorian Environmental Act. It is argued that a general environmental duty of care is a shift away from the "after the harm has occurred" approach to a new "prevention-focused and risk-focused" approach and is an important complementary to sustainable development. Finally, it proposes a "soft approach" to the implementation and enforcement an environmental duty of care.

Margaret Savage, Ph.D. Candidate, School of Law, University of Manchester:
Environmental Regulatory Awareness in Irish SMEs.

Small and medium enterprises (SMEs) comprise 99.7% of Irish enterprises and whilst individual SMEs may present minimal environmental risk, the aggregate risk posed is large. The aim of environmental legislation is to encourage the regulated to behave in ways that they might otherwise not. Thus, extensive environmental compliance would likely contribute significantly to environmental protection. The production levels of small industries tend to fall below thresholds that would require them to be regulated under the integrated licensing system and, potentially, SMEs have

more than one environmental regulator. Additionally, a plethora of disparate environmental legislative provisions can apply to individual small firms. These and other factors could make navigating the environmental compliance route difficult for SMEs. Environmental compliance behaviours and perceptions in SMEs are not well understood. There is little empirical evidence in the literature regarding the extent of environmental compliance awareness in SMEs although the literature indicates that SMEs are unlikely to fully know and understand their environmental compliance obligations, which raises the question: how can they be in compliance?

The aim of this study is to discover whether, why and how micro and small enterprises in the food sector in Ireland access information on environmental legislative requirements. To date, the awareness and understanding of some legislative requirements in relation to waste and wastewater has been studied by conducting semi-structured interviews with owner-managers in 27 SMEs in the food processing and manufacturing sector in Ireland. In addition, the owner-managers were asked how they access information and how best to provide it to them. The largely qualitative interview data will be fully analysed using thematic analysis.
This paper offers reflections on the selection of the method and experience of the data collection process so far. Preliminary observations from the interviews are also presented.

Sahara Nankan, PhD Hardiman Scholar, Irish Centre for Human Rights, National University of Ireland Galway:
The Critical Interface between SDG 5 'Gender Equality' and SDG 6 'Sustainable Water and Sanitation for All': A Focus on Women's Participatory Justice from an Environmental Human Rights Perspective—Questions of Structure.

The increasingly important juncture between environmental law and human rights has served as a basis for the establishment of a rights-based approach to environmental protection and has also contributed towards the evolution of "environmental human rights" at the international regulatory level. Separately but not unrelatedly, the notion of "participatory justice" plays an under-valued yet critical role in both environmental and socio-economic rights adjudication in domestic constitutional regimes as well as under international human rights law. This research examines the relationship between women and water law

and policy, focusing on participatory justice from an environmental human rights perspective.

In developing countries water and sanitation issues disproportionately affect women and girls due to biological needs (such as menstrual hygiene management and maternal health); social norms (primary responsibility for water collection); and particular risks (gender-based violence and sexual assault) (UN Special Rapporteur on Water and Sanitation thematic report, 2016). Despite women playing significant roles in water resources management, their representation at the domestic, catchment and global levels does not match that of men. There are also structural barriers to full and effective participation deriving from factors including socio-cultural norms.

Universal access to safely managed WASH and appropriate management of water resources will only be achieved if the rights of women as key stakeholder participants are fulfilled. Principle 20 of the *Rio Declaration on Environment and Development* in 1992 affirmed early on women's vital role and participation in sustainable development. More recently, the UN Special Rapporteur in 2016 identified gender equality as a thematic gap that requires redress, particularly on the issue of enhanced participation in water governance. The significant coming into force of the 2013 Optional Protocol to the *International Covenant on Economic, Social and Cultural Rights*, and the UN *Framework Principles on Environmental Human Rights* in 2018, provides an opportune moment to revisit the concept of participatory justice and to outline the current state of play regarding gender and procedural fairness in the area of water security and adjudication.

The project thereby seeks to address gender inequality and discrimination gaps in water governance and adjudication, with a focus on enhancing women's full and effective participation and fulfilling adjudicative procedural rights requirements to meet their strategic needs, namely in; decision-making, planning, right to information, access to justice and strategic interest litigation. Approaching women's participatory justice from the evolving human right to water and sanitation (UN CESCR GC 15; UN Res 64/292) within the framework of integrated SDGs specifically, Goal 5 'Gender Equality' and Goal 6 'Sustainable water and sanitation for all' (target 6.b 'stakeholder participation'), provides a unique opportunity to reflect on the challenges in normative content and realisation of this emerging right in this context. Domestic jurisprudence as well as case studies at the international level may act as significant touchstones to better inform the analysis.

This paper therefore addresses the structural problems arising in framing an environmental human rights research project within this topic area, addressing the following key questions: What is the relationship between substantive gender equality, participation and sustainable water security? What are the value-based and instrumental justifications for, as well as barriers to, participatory justice in water rights adjudication? How are domestic practices shaping, or are being shaped by, international regulatory norms and practices?

Lenka Hlaváčová, Ph.D. Candidate, Faculty of Law, Charles University Prague:

Achieving Effective Public Participation in Environmental Decision-Making Processes: The Example of the Czech Republic.

Public participation in environmental matters currently represents one of the generally accepted principles of environmental law. Since its formal recognition at international level dating back to the second half of the last century it has well established in the legal instruments dealing with environmental matters and today is embedded in a number of international treaties as well as in national legislation of developed countries. No matter what general consensus seems to be about this principle, its implementation and achieving truly effective public participation still seems problematic. One of the main reasons is the ubiquitous conflict of interests as well as the fear of side effects of public participation such as slowing decision-making processes, abuse of the right, etc. This is also the case in the Czech Republic where the efforts to meet international obligations regarding public participation clashes with the interest of rapid development and other interests and resolves in constantly changing legislation which continues to be very distant from the ideal of ensuring truly effective public participation in environmental decision-making processes. The aim of the paper is to demonstrate the difficulties in implementing the principle of public participation in national legislation shown on the example of the Czech Republic and suggest a way to deal with them.

Clodagh Daly, Ph.D. Candidate, Sutherland School of Law, University College Dublin:

Leading the Way to a Clean Energy Future? Evaluating the Electricity Supply Board's Continued Reliance on Colombian Coal.

Moneypoint, Ireland's only coal-fired power station, is owned and operated by the Electricity Supply Board (ESB), and relies entirely upon imported coal for its operations. Since 2011, over 90% of this coal has been sourced in Colombia, predominantly from the Cerrejón coal mine. In the pursuit of coal extraction, Cerrejón has been accused of displacing thirty-five communities, and restricting local communities' access to fresh water. Despite Cerrejón's well-documented and, indeed, disturbing accusations, the ESB's Environmental Impact Assessment (EIA) was approved by the Environmental Protection Agency in 2018, and the semi-State company received license to continue their operations at Moneypoint. In accordance with the ESB's obligations under European Union EIA regulations, this paper contends that failure to include the social impacts of coal extraction in the ESB's EIA constitutes a potential breach of EIA law. This failure further demonstrates a blatant disregard for distributive justice, as conceptualised through the Capability Approach. This paper therefore doctrinally assesses how the Capability Approach can be applied in examining the social impacts of resource extraction, focusing on two case studies concerning Cerrejón's resettlement and water access policies.

These case studies ultimately tell a bigger story of the dependency of the 'global North,' on the resources of the 'global South.' As these problems are fed by global energy demand, the solution too must be global. Therefore, to advocate the inclusion of local communities, and the promotion of distributive justice in the energy supply chain, the social impacts of resource extraction should be included in EIAs. Accounting for the full scope of a project would ensure EIAs are carried out as they were intended – to evaluate the full impact of a project. Moving forward, socially inclusive EIAs are particularly important in the transition towards renewable energies – a transition that must, above all, champion distributive justice.

Godswill Agbaitoro, Ph.D. Candidate, School of Law, University of Essex:

Legal Challenges in the Transition to Renewable Energy: Possible Solutions.

Presently, there is a strong shift towards a low-carbon energy industry in the world. By this, many countries are beginning to focus more on the need to have a decarbonised environment with more focus on the development of renewable energy. This is evidenced by a milestone which occurred in 2013 when the world added about 143 gigawatts of renewable energy electricity capacity, compared to 141 gigawatts of fossil fuels energy.[6] What then does this milestone portends for the future? It means that the shift to renewable energy will continue to accelerate and that by 2030, new capacity added from renewables will be more than four times that of fossil fuels.[7] However, despite the attainment of this feat, the biggest test for the renewable sector and possible transition in the global energy arena remains the challenge of developing and deploying technology for renewable energy that can compete with the benefits offered by fossil fuels - currently regarded as steady reliable and affordable. To this end, my proposed presentation at the conference will focus on identifying the challenges to such transition as well as suggesting possible solutions. A brief discussion of some of the challenges (non-exhaustive) is undertaken below.

A major challenge that impedes the transition to renewable energy in the world is the problem of how to deal with the skewed international legal and regulatory framework that favours the development of conventional energy such as oil and gas. The truth remains that renewable energy has not been given so much international legislative prominence when compared to conventional energy. This, of course, has affected its development globally. Although few countries such as Germany have evolved legislative measures to promote renewable energy development and is rated today as one of the world leaders in the development of renewables.[8] Notwithstanding, its contribution to world energy has not been embraced fully.

Another widely recognised challenge to the transition of renewables is rooted in cost/finance. Specifically, the capital cost or upfront of building and

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[6] Dave Wright and Javier Eduardo, 'Policy Challenges and Opportunities for Renewable Energy' available at https://law.stanford.edu/2015/11/01/policy-challenges-opportunities-renewable-energy/ accessed 20 December 2018.

[7] Dave Wright and Javier

[8] Peter Oniemola, 'Integrating Renewable Energy into Nigeria's Energy Mix through the Law: Lessons from Germany' 2 (2011) Renewable Energy L. & Pol'y Rev. 29

installing renewable energy technologies such as solar and wind farms, for instance, can be expensive. Although, most renewables are generally cheap to operate as their fuel is free and maintenance is minimal, however, the bulk of the expense comes from building the technology.[9] To this extent, this has made it practically difficult to promote its development and use in the global energy sector.

Presently, in the global energy market, too much concentration is placed on power generation from conventional energy, with very little to consider when it comes to power generation from renewables. For instance, it is argued that power project developers and independent power producers (IPP) face difficulty obtaining bank loans because of uncertainty as to whether utilities will continue to honour long-term purchase agreements to buy power.[10] Additionally, proven cost-effective technologies are still perceived as risky due to lack of experience in renewable energy project.[11] There is also another twist which suggests that renewables face stiff competition from more established, higher-carbon sectors even at the market level. All of these make any effort or attempt to transit to renewables an uphill task.

In the global energy platform, it is generally difficult for renewable proponents to compete with their counterpart in the fossil fuel industry. Although both generate energy for economic development, national governments often tend to favour the development of fossil fuels due to their large influence in the energy sector. Practically, this is done through subsidies to increase the domestic production of fossil fuels while renewables receive much less preferential political treatment.

Critically, there is a need to consider the transition to cleaner energy for the future through renewables. Arguably, such transition will be in tandem with concerted effort to address climate change and global warming which has become a source of concern to the international community. To overcome the challenges identified above and realize the transition, there has to be the development of full-scale, commercially viable renewable energy

[9] Barriers to Renewable Energy Technologies, Union of Concerned Scientist available at https://www.ucsusa.org/clean-energy/renewable-energy/barriers-to-renewable-energy#.XB_1YVX7TIU accessed 20 December 2018.
[10] Fred Beck and Eric Martinot, "Renewable Energy Policies and Barriers", available at http://www.martinot.info/Beck_Martinot_AP.pdf accessed 20 December 2018) 369.
[11] Godswill Agbaitoro, "Is Having a Robust Energy Mix a Panacea for Resolving the Energy Crisis in Nigeria?" (2017)7 (4) Renewable Energy L. & Pol'y Rev, 12.

infrastructure around the world in order to power the future.[12] This will involve the building of large wind farms to rooftop solar arrays to electrical grid upgrades and electric vehicle charging stations and much more. Importantly, law and policy figure prominently in this shift. Will law and policy, instruments such as renewable portfolio standards, feed-in tariffs, amongst others will be designed as primary tools that may be needed to facilitate the transition. Above all, legislative change and policy direction led by national governments all over the globe have a key role to play in harnessing and directing market forces in a way that can create certainty for investors and stimulation for innovation.[13] They must ensure that there is an increase in clean energy through subsidies, loan assistance, and research and development.

Laurie O'Keefe, Ph.D. Candidate, School of Law, University College Cork:
Assessing the Effectiveness of Sea-Fisheries Law: A Practitioner Perspective.

This presentation will discuss the methodological approach taken by the author in assessing the effectiveness of sea-fisheries law, or more specifically the effectiveness of the statutory framework and its implementation and enforcement. "Effectiveness" as a concept as it relates to legal rules is difficult to describe and also to assess. A legal rule may be described as "effective" if it is well-designed and well-implemented in that it solves the problem it was designed to address. However, appropriate effectiveness indicators are lacking and any assessment of effectiveness essentially remains a value judgment dependant on criteria used. In general terms, commentators advocate better legislation and better implementation to improve effectiveness of the law. Therefore, "effectiveness" itself still remains challenging to assess. In order to unpack the notion of what may be considered an "effective" statutory framework and enforcement regime for sea-fisheries, the author adopted a practitioner perspective informed by legal realism in addition to traditional doctrinal research. This presentation will explore the benefits and challenges of the practitioner perspective as a methodological approach to legal research.

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[12] Dave Wright and Javier Eduardo, 'Policy Challenges and Opportunities for Renewable Energy' available at https://law.stanford.edu/2015/11/01/policy-challenges-opportunities-renewable-energy/ accessed 20 December 2018.
[13] Dave Wright and Javier Eduardo, 'Policy Challenges and Opportunities for Renewable Energy' available at https://law.stanford.edu/2015/11/01/policy-challenges-opportunities-renewable-energy/ accessed 20 December 2018.

Alena Chaloupková, Ph.D. Candidate, Faculty of Law, Charles University Prague:
Legal Aspects of Habitat Fragmentation Caused by Roads in the Czech Republic.

Habitat fragmentation is one of major causes of increasing biodiversity loss across Europe, and one of the significant (and rather specific) barriers contributing to it are major roads with busy traffic. Nevertheless, it is obvious that roads are needed, and car traffic is still on the rise. The crucial question of the proposed paper is therefore clear – how to deal with the challenge of habitat fragmentation by roads in the context of legal biodiversity protection? The issue will be discussed from the perspective of current development in the Czech law, and generally implemented in the European context.

Sarah Enright, Ph.D. Candidate, School of Law / MaREI, University College Cork:
Marine Protected Areas: Effective Conservation or Paper Parks? The Challenge to Achieve Meaningful Protection of Marine Biodiversity.

Marine Protected Areas (MPAs) are recognized by scientists and policy makers as a key tool for marine biodiversity conservation worldwide. In response to global biodiversity targets, there has been a remarkable growth in MPA designations in recent years. However, in the rush to designate, many of the newly created MPAs lack tailored management plans, allow many types of extractive activities, and are not enforced or monitored, thus leading to a false sense of accomplishment. A key problem is that the legal definition of what constitutes an MPA varies widely around the world, and is often vague and open-ended. A universally accepted definition can neither be derived from international treaties nor from individual State practice. Different legal bases for MPAs can be found in international conventions, regionally and in national designations. All provide for distinct categories of MPAs, which differ mainly according to their objectives. MPAs can differ dramatically in their levels of protection, from fully protected no-take marine reserves, which prohibit all extractive activities, to multi-use zoned MPAs which may limit certain activities (e.g. commercial fishing) while allowing others (e.g. artisanal fishing, tourism, conservation). Differences also exist with respect to national management, designation and regulation of MPAs. It has been suggested that the term MPA is currently used so loosely that it no longer connotes meaningful protection (Sala *et al*, 2018). Furthermore, recent studies

have found that intense human pressures are undermining protected areas (W.K.R Jones *et al*, 2018) and that in the marine context a lack of transparent international MPA principles and standards may be a contributing factor (Dureuil *et al*, 2018).

This presentation will discuss the rapid rise of MPAs as a popular conservation tool and examine the challenges they are now facing including *inter alia* a lack of legal coherence surrounding MPA designation and the use of targets in an areal manner to measure progress, all of which is risking an illusion of protection which undermines both MPA effectiveness and international biodiversity conservation goals.

Edwin Alblas, Ph.D. Candidate, Sutherland School of Law, University College Dublin:

Promoting Agri-Environmental Farming Practices: The Case of Environmental Cooperatives in the Netherlands.

The myriad of environmental rules that have been established by the European Union (EU) over the last thirty years have not changed the fact that biodiversity and nature conservation across the Union is still in an alarmingly feeble state. A key issue here seems to be not the lack of rules, but rather the lack of an effective translation from the EU domain to that of individual actors that the rules are targeted towards. Focusing specifically on the governance of nature conservation and biodiversity protection in agricultural landscapes, the present research project tests the potential of collective approaches in promoting agri-environmental farming. The study takes the Netherlands as a case study, where recently, regulatory powers such as the issuing of subsidies for agri-environmental activities, and the monitoring of whether these activities are actually carried out, have shifted from the EU and national level to so-called 'environmental cooperatives'. Farmers seeking to partake in agri-environmental subsidy schemes can only do so by joining one of the currently forty region-based cooperatives in place, which are composed of groups of farmers and other stakeholders that have organized themselves as legal entities.

While the potential value of environmental cooperatives in mobilizing farmers' commitment to environmental protection has been recognized in the literature, numerous risks of the cooperative approach can also be distinguished, including regulatory capture and policy drift. Applying the Regulator → Intermediary → Target (RIT) model grounded in regulatory

theory, my research examines empirically to what extent these environmental cooperatives have been successful in aligning the regulatory targets (i.e. farmers) more closely to the goals and strategies of the key EU regulations in the field, flowing most prominently from respectively the CAP and the main EU Nature Directives (Birds & Habitats Directive).

Charlotte Bishop and Luke McGivern, LL.M. (Environmental & Natural Resources Law), University College Cork:
It's Rubbish! Ireland's Waste Collection Sector: An Examination of Environmental Impacts and the Potential Legal Implications of Re-municipalisation.

In the context of a pilot 'Environmental Law Clinic' module, four students enrolled in the LL.M. (*Environmental & Natural Resources Law*) Programme undertook to prepare a professional report exploring the environmental consequences of the current system of waste collection services in Ireland, the consistency of this system and its related consequences with the requirements of the existing waste management regulatory framework, and the legal feasibility of the various options available for 're-municipalisation' of the waste collection sector. This presentation will outline the steps taken in addressing this complex and multi-faceted research project and the challenges faced in drafting a policy paper / report on behalf of a high-profile and politically engaged real-life client.

Michael Boland, Ph.D. Candidate, School of Law, University College Cork:
Using the "Cradle to Cradle" Framework to Build a Circular Economy.

An influential book called *Cradle to Cradle* can be used by business to imagine new ways of production. It presents the biological cycle and the technical cycle as a framework for the circular economy. The biological cycle imagines business using recycled and biodegradable materials in production. Popular examples of this include the use of spent mushroom waste in packaging and the creation by Adidas of biodegradable sports shoes through the use of spider silk in their design. The practice of recycling is involved in the technical cycle, however, it also emphasises the value of refurbishment. In the business context, this means simply replacing old parts of products with new parts rather than creating a whole new product from scratch. Ultimately, the circular economy is a sustainable alternative to the current linear system of production. The purpose of this paper will be to explore *Cradle to Cradle's* approach to the circular economy and consider how business can (and have) incorporated *Cradle to Cradle* principles in their operations.