

ROUTLEDGE HANDBOOK OF PRIVATE LAW AND SUSTAINABILITY

*Edited by Marta Santos Silva, Andrea Nicolussi,
Christiane Wendehorst, Pablo Salvador Coderch,
Marc Clément and Fryderyk Zoll*

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CHAPTER 16

PROPERTY LAW AND (MORE THAN ONE NOTION OF) SUSTAINABILITY

A New Field

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PROPERTY LAW AND (MORE THAN ONE NOTION OF) SUSTAINABILITY

A New Field

*Björn Hoops*¹

16.1 Introduction

Property law, more specifically private-law ownership, and sustainability have a complicated and contradictory history. In 1968, Garrett Hardin argued that nature and resources held in common were doomed to deteriorate in a ‘Tragedy of the Commons’ and proposed exclusive private ownership or strict state regulation as means to ensure their sustainable use.² Elinor Ostrom later refuted Hardin’s argument, demonstrating that the Commons could be sustainably governed and that the Tragedy of the Commons would only occur under narrow conditions.³ While Ostrom has shown that exclusive private ownership or strict state regulation is not needed for the sustainable governance of nature and resources, we have realised that property law with exclusive ownership at its core provides the legal foundation for extractive capitalism.⁴ This economic system fuels global warming and the overexploitation of nature and resources, endangering biodiversity, the livelihoods of billions of people, and the stability of human societies.

Property law’s contribution to threatening our very existence makes it imperative that we change our use of property law and/or adjust property law itself, to promote a sustainable economy and society. In fact, property law and its use have already started to change and contribute to more sustainable practices. For instance, New Zealand employs ownership to enhance environmental protection. New Zealand’s legislature recently vested ownership of the former national park Te Urewera in a legal person embodying this natural entity, thereby introducing a new category of owners to property law.⁵ Property-law scholars seek to integrate this change into the legal system and ascertain its benefits for environmental protection.⁶ Beyond such legal-dogmatic research,⁷ normative⁸ property-law scholarship seeks change to create a more sustainable property law.⁹ For example, Ugo Mattei has been advocating for a far-reaching reform of ownership to enhance the influence of local communities over local natural resources and promote the conservation of nature.¹⁰

This scholarship exemplifies that a new research field has been born: ‘Property Law and Sustainability’ (PropLS). In this field, ‘sustainability’ serves as a criterion for the legal-dogmatic assessment of existing law and the normative development of adjustments to the law. This contribution identifies the definitions of ‘sustainability’ followed by existing PropLS-scholarship,

thereby examining the extent to which ‘sustainability’ can actually serve as a common criterion and denominator in the field. ‘Sustainability’ is a vague term. On the one hand, such a broad term may unite diverse scholars under a single umbrella. On the other, differences in the definition of ‘sustainability’ may create isolated sub-groups of scholars and undermine the exchange within the field. While, for instance, ‘sustainable development’, as defined by the United Nations’ Brundtland Commission in 1987,¹¹ incorporates a social dimension that requires us to meet the basic needs of all people on Earth,¹² PropLS-scholarship tends to focus on the sustainability of our society and economy through the lens of the preservation of the natural foundations of human life (or ‘ecological sustainability’).¹³ As this contribution argues, even within the scholarship on property law and ecological sustainability, scholars subscribe to diverging definitions of ‘sustainability’. However, this contribution pleads for an inclusive field of ‘Property Law and (Ecological) Sustainability’ because the legal issues raised are so similar that scholars with diverging definitions of ‘sustainability’ will still greatly benefit from exchange and collaboration.

This contribution is structured as follows. Section 16.2 defines the two elements of PropLS: property law and sustainability. As ‘sustainability’ proves to be too complex for legal researchers to apply as a criterion, Section 16.3 examines more concrete criteria applied in PropLS-scholarship. As these criteria follow different definitions of ‘sustainability’, Section 16.4 concludes this contribution with a plea for an inclusive field of ‘Property Law and Sustainability’. This contribution does not purport to deal with all PropLS-scholarship. As property law is still predominantly national law and the international debate is limited, this contribution discusses examples from Belgian and Dutch law in addition to examples from the international literature, in particular theoretical literature from common-law jurisdictions and comparative literature from Europe.

16.2 Property Law and the Many Meanings of Sustainability

Property Law and Sustainability consists of two elements: ‘property law’ and ‘sustainability’. Property law is taken in a wide sense and is not confined to the private property law on ownership, limited property rights and condominiums. It includes the links of private property law to other branches of private law, for example, insolvency and tenancy law, as well as public property law on, for instance, constitutional property protection and land use regulation.

As for sustainability in the sense of ecological sustainability, there is not a uniform definition of sustainability, but several ones.¹⁴ Without purporting to give a comprehensive account of the sustainability discourse, this section sketches two definitions of sustainability based on economic research (Section 16.2.1) as well as three definitions of a ‘sustainable future’ from sociological research (Section 16.2.2), providing the basis for examining the criteria used in PropLS-scholarship in Section 16.3.

16.2.1 Sustainability in Economics

The Brundtland Commission defined ‘Sustainable development’ as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.¹⁵ Resources thus have to be preserved for future generations.¹⁶ Environmental economists posit that sustainability can be equated with a constant amount of capital over time and available to succeeding generations.¹⁷ Capital refers to natural capital, such as soils, water, and wood, and other forms of capital such as products made by human society.¹⁸ In this context, a rough distinction is made between weak and strong sustainability, which can help categorise PropLS-scholarship.

Weak sustainability refers to an overall constant amount of capital. The composition is irrelevant, which means that natural capital can be substituted with human-made capital and *vice versa*.¹⁹

This type of sustainability is mainly aimed at securing the wealth of human societies through the availability of capital. However, it does not necessarily include an obligation for humans to preserve nature because human-made capital can replace natural capital.²⁰ Under the notion of ‘weak sustainability’, this substitution of natural capital, which is a technical expression for the destruction of nature, will only end where human-made capital depends upon the preservation of natural capital, for example, where the preservation of biodiversity is essential to maintaining or expanding agricultural production. Following weak sustainability involves the danger that natural capital will be depleted, eroding the natural basis of human life.²¹ The discourse on green or sustainable growth, which promotes, among others, a de-coupling of economic growth from the use of fossil fuels and other natural resources, could be regarded as pursuing weak sustainability because this green or sustainable economy still requires natural resources and growth leads to the use of yet higher amounts of natural resources.²²

The alternative concept is strong sustainability. Under this concept, natural and other forms of capital cannot be substituted and must both be maintained at current levels or increased. Human society thus takes on a responsibility to preserve nature and, if possible, to increase the amount of natural capital available.²³ The 2015 Paris Agreement, for instance, pursues strong sustainability within a certain range and certain parameters. Article 2(1) of the Agreement limits the global temperature rise to 2°C compared to pre-industrial levels. The natural capital represented by a ‘healthy global climate’ can thus only be substituted by human-made capital up to a certain threshold. From that point onwards, economic activities and growth would have to be entirely de-coupled from emitting harmful greenhouse gases. However, as is further explained in Subsections 16.3.2 and 16.3.3, de-coupling through energy efficiency and the use of renewable energy generally requires the destruction of other natural capital. This means that the Paris Agreement can only pursue strong sustainability to the extent that new technologies or the reduction of consumption avoid the destruction of natural capital for climate protection.

16.2.2 Sustainable Futures in Sociology

While strong and weak sustainability set goals for the sustainable preservation of resources, notions of a ‘sustainable future’ paint a picture of a sustainable society with a focus on the steps needed to achieve a sustainable future. The sociologists Adloff and Neckel have created a useful taxonomy for analysing these notions,²⁴ enabling us to categorise and contextualise further different types of PropLS-scholarship. These authors distinguish between *Modernisation*, *Transformation*, and *Control*.

‘Modernisation’ achieves a sustainable future through an improvement of the ecological balance of the current social order without doing away with either liberal democracy or the market economy.²⁵ Essential reforms include the greatest possible de-coupling of economic growth from fossil fuels and other natural resources (‘green growth’). The economic notion of weak sustainability appears closely linked to this definition of a sustainable future.

By contrast, proponents of ‘Transformation’ argue that Modernisation is insufficient to meet the ecological challenges of our times.²⁶ There are a variety of approaches to Transformation, but what the proponents essentially advocate for is an economy and society no longer based on competition and growth. For instance, the degrowth movement proposes extremely restrained consumption patterns and resource conservation,²⁷ and the post-capitalist movement pleads for digital practices of sharing and exchanging outside market constraints.²⁸

Finally, ‘Control’ is the darkest scenario of a sustainable future, which, as Adloff and Neckel admit, can be hardly considered sustainable. It envisions an environmental emergency, in which a

technocratic government would replace liberal democracy and suspend constitutional and human rights.²⁹ This government would implement the measures needed to adapt to environmental disasters such as global warming. Examples of control would be plans for geo-engineering without democratic deliberations, such as the extraction of CO₂ from the atmosphere, or the deployment of the military to contain migration or social unrest.

16.3 Diverging Criteria as Operationalisation of Sustainability

The definitions of sustainability from Section 16.2 refer to aggregated amounts of resources or other goals at national or an even higher level. Even public-law scholars will have difficulty assessing law against these definitions, although they are used to examining laws and regulations solving macroeconomic or other societal problems.

Sustainability research on private property law and related branches of private law encounters an additional problem at a conceptual level. Private law is a discipline that focuses on the collaboration within groups, for example, through the rules on communities of property or in company law, or on transactions between private entities or of private entities with public entities on an equal footing, such as contracts of sale. Just as microeconomics,³⁰ private law generally omits to consider the aggregate consequences of all such transactions combined. Private lawyers focus on the reasonableness and fairness of single actions with or within a delineated group. Unlike public law, modern private law struggles to embrace the thought that actions that are fair and reasonable for the involved groups may, before and/or after the aggregation of these actions, result in unfair and unreasonable consequences for society as a whole.³¹ For example, private lawyers tend to ignore the diffused harm done by single exercises of property rights in, and contracts of sale of, gas and oil.³² The dilemma for private lawyers to address is that global warming and other crises undermining sustainability are exactly the result of what private lawyers perceive as perfectly reasonable and fair actions. All this suggests that weak or strong sustainability, both based on aggregates of capital accounts, or notions of a sustainable future would be all but impossible to handle for private-law researchers as a criterion of assessment.

This is not to say that public interests, such as environmental protection, cannot be pursued through private law. There is a wide range of examples in, for instance, the Netherlands alone, from the rights of municipalities under the Dutch civil code to interfere with the affairs of an association of apartment owners to safeguard construction standards³³ to tort liability of big private greenhouse gas emitters.³⁴ However, these private-law rules pursue specific goals that are easy to analyse and apply, such as compliance with construction standards or the reduction of the greenhouse gas emissions of one company. The vague notions of sustainability are by far less ‘user-friendly’. Private-law research (and, to a lesser extent, also public-law research) thus needs to operationalise ‘sustainability’ by translating this abstract notion into clear criteria that mark certain individual actions as (un)fair or (un)reasonable. Note that this operationalisation does not rule out the conception of ‘sustainability’ as a general principle concretising rights and obligations under private law or public law. Rather, it can provide guidelines on how to interpret and apply such a principle.

This section outlines a number of criteria that operationalise sustainability in PropLS-scholarship, analyses how they align with the different notions of sustainability from Section 16.2 and gives examples of research using one of these criteria. This outline in no way purports to be comprehensive. The criteria are the limitation or ban of the extraction of a natural resource (Section 16.3.1), the promotion of energy from renewable sources (Section 16.3.2), and the promotion of energy efficiency and the circular economy (Section 16.3.3). This sub-section concludes with a few observations (Section 16.3.4).

16.3.1 Limiting or Banning the Extraction of a Natural Resource

To preserve a specific natural resource, the limitation or ban of extraction operationalises sustainability.³⁵ This criterion generally pursues a form of strong sustainability because it does not allow for the further degradation of a specific natural resource. However, take into account that in a globalised economy without a global authority, preserving a specific resource in one country is likely to lead to the overexploitation of a resource in another. This criterion resonates with a notion of Transformation that pleads for resource conservation. The preservation of a specific resource can be applied to a delineated situation involving a distinct group of people and is thus also accessible to private property lawyers because the criterion does not involve aggregations of actions and/or groups. Property lawyers can contribute to strong sustainability and Transformation by applying or adjusting property-law rules and doctrine so as to limit or ban extraction to the extent needed to preserve the natural resource. If all natural resources were governed in this way, property law would successfully contribute to strong sustainability and Transformation.

A tremendous contribution using this criterion is the work on the Commons by Ugo Mattei and his disciples.³⁶ The essence of their work is that private ownership, not adequately counterbalanced by regulation in the public interest, leads to the over-extraction of natural resources and unsustainable economies. This failure of state power leads the authors to plead for restricting private control over natural resources and the re-introduction of common ownership of natural resources and local participatory decision-making on the use of these resources. Assuming that local communities have an interest in preserving their local resources and are able to fulfil this task, this group of scholars view the Commons as a means to fulfil basic needs and foster generative and regenerative community activities.³⁷

‘Rights of Nature’ are another approach divesting private owners of control over natural resources. Legislation or court judgments declare natural entities to be legal persons (environmental persons) with rights and liability. Countries such as Australia, Canada, Cambodia, India, New Zealand, and Spain have made forests, lakes, rivers, and national parks legal subjects.³⁸ Responsible and independent representatives decide on the use of the natural entity and it is, therefore, insulated from private control. Legal scholars have either advocated for such a solution³⁹ or have been analysing and advancing our understanding of environmental persons.⁴⁰ New Zealand has added a particular twist to the environmental persons Te Urewera and Te Awa Tupua in that the former national park Te Urewera owns itself and the river Te Awa Tupua owns its own riverbed.⁴¹ This property right would be protected under, for instance, Article 1 of the First Protocol to the ECHR if the land were located in a signatory state.⁴² It would, therefore, also insulate the natural entity to some extent from state action and democratic decision-making within the human state.

While Mattei and the Rights of Nature divest a possible private owner of their control and subject the use of a resource to a form of collective decision-making, another strain of research seeks to limit the owner’s extraction and oblige them to maintain the natural resource. In the United States, ‘Green Property’ theorists recognised the interdependence between humans and nature and argued that to achieve a sustainable balance in the ecosystem, ownership had to be automatically limited by environmental protection.⁴³ Redefining property and ownership, one goal of green property theory is to ensure that human owners have a duty not to harm the environment, even in the absence of sufficient environmental regulation. Australian scholars have put forward similar arguments, for example, under the banner of ‘Earth Jurisprudence’.⁴⁴ While the research on the Commons and Rights of Nature is aimed at preserving specific resources, green property theorists rely upon the reinterpretation of traditional legal concepts affecting all owners.

In Europe, with the same impetus to limit the owner's scope for manoeuvring, some scholars also rely upon open norms and concepts. They examine whether the very concept of ownership or the doctrine of the abuse of ownership could prevent owners from extracting too much or even compel them to maintain a natural entity actively.⁴⁵ Other comparative property-law research in Europe investigates the value of limited property rights to sustainability. They pose the question of whether positive obligations to maintain a forest or another natural entity could be imposed through servitudes (easements).⁴⁶ Depending on the content of such an obligation and reliable enforcement by the holder of the servitude, it may effectively protect a natural entity and thereby serve strong sustainability and Transformation.

16.3.2 *Facilitating Energy from Renewable Sources*

Another criterion for operationalising sustainability is the facilitation of the generation of electricity and heat from renewable sources. The replacement of fossil fuels with renewable energy sources forms part of an effort to de-couple our current level of production or even its growth from emitting greenhouse gas emissions.⁴⁷ Property-law research that uses this criterion seeks to identify and change property-law rules that deter the installation of renewable energy capacity in the form of solar panels, heat pumps, district heating systems, and other renewable energy installations.

One strain of research specifically scrutinises whether property law sufficiently facilitates the installation of, and connection to, district heating systems.⁴⁸ Among other insights, it identifies the problem that the operator of a district heating system depends on the cooperation of the landowners and needs to make agreements on how the system can be installed and maintained. Another strain of research seeks to identify and circumvent obstacles to renewable energy installations in a condominium.⁴⁹ It turns out that the majorities of apartment owners and the formalities required under the rules on apartment rights discourage them from installing renewable energy installations.⁵⁰

A common culprit in PropLS-scholarship on renewable energy, particularly in Belgium and the Netherlands, is the doctrine of accession.⁵¹ At the source of this debate was the insight that many households refrain from installing sources of renewable energy because of the high up-front investment. Leasing solar panels or another renewable energy installation would be an option to make renewable energy more accessible: the lessor would install, maintain, and replace the renewable energy installation for an affordable monthly fee and the lessee would save on their energy bill. The rules on accession pose an obstacle to this lease agreement. They entail that the owner of the land and house, the lessee, also becomes the owner of, for instance, the solar panels installed on the roof. The lessor thus loses their security in the form of ownership, and the solution to this problem, the creation of a right of superficies (*opstalrecht*), makes the lease more expensive and less accessible. For this reason, researchers explored and advocated for a more lenient interpretation of the rules on accession, preventing the landowner from becoming the owner of the renewable energy installation.

While a ban or restrictions to extractive ownership clearly pursue strong sustainability and Transformation, facilitating the generation of energy from renewable sources cannot be classified this easily. It is true that renewable energy replaces energy from fossil fuels, thereby protecting the climate.⁵² However, solar panels, for instance, require rare metals and cause toxic waste.⁵³ Also, psychological and economic mechanisms tend to create an incentive to consume more and might eventually result in an increase in energy usage. Through, for instance, 'moral licencing', the awareness of using renewable energy may encourage consumers to engage in higher energy usage or other unsustainable behaviour.⁵⁴ When less costly than fossil-fuel alternatives, renewable energy

may initiate an economic rebound effect, resulting in higher consumption.⁵⁵ More generally, green growth, a notion that incorporates the use of renewable energy for growing the economy, will require more resources than a zero-growth economy.⁵⁶ Depending on how these considerations play out on regeneration rates and on how different natural resources – specifically fossil fuels and rare metals – are weighed, renewable energy may still reduce the available natural capital because it consumes natural resources more quickly than they naturally regenerate. Instead of pursuing strong sustainability, this factor would only pursue weak sustainability in that case. Needless to say, in comparison to the use of fossil fuels, it does reduce the consumption of natural resources and makes human activity more ‘weakly sustainable’.

Regarding notions of a sustainable future, the transition towards renewable energy appears to promote a reform of liberal democracy and a capitalistic market economy by de-coupling economic growth from fossil fuels. This criterion does not question our competitive and growth-based economic order and still heavily relies on the extraction of natural resources. Hence, it appears to be aimed at Modernisation rather than Transformation.

A final strain of PropLS-scholarship on renewable energy installations belongs to the realm of public law and may pursue yet another notion of a sustainable future to some extent. This strain investigates the extent to which the State can force owners to install renewable energy capacity in their buildings, with or without compensation.⁵⁷ The central object of investigation is the property of the owner as a constitutional and human right. On the one hand, this research acknowledges the current legal order and primarily seeks to identify ways to promote the use of renewable energy installation within the boundaries set by property rights. In this respect, this research is similar to the other strains already described. On the other hand, it contains the seed of legal coercion as a last resort to avert an environmental emergency. The more global warming progresses, the weaker property protection is likely to become and the closer this research may drag towards a notion of ‘Control’.

16.3.3 Promoting Energy Efficiency and the Circular Economy

A criterion with similar strains of research and characteristics as facilitating renewable energy is the promotion of energy efficiency. For example, insulation is a means to improve the energy efficiency of buildings. Another criterion that has inspired the discussion about the rules on accession in Belgium and the Netherlands is the transition to a circular economy. In a circular economy, no materials of value are thrown away and are instead processed, upgraded (if needed), and re-used for their former or a purpose of higher value.⁵⁸ The promotion of the circular economy serves as a criterion for adjustments of the current legal rules in the work of many legal scholars.⁵⁹ The rules on accession are an example of property-law rules that potentially deter the transition to a circular economy.⁶⁰ In order for a circular economy to work, a producer needs to have access to the materials that need to be re-used. But, to ensure the producer’s access to the goods, the consumer does not buy, but, instead, leases all types of products, including most of the components of their house such as the floors and non-structural walls.⁶¹ Again, accession deprives the lessor of their ownership and thereby gives rise to an obstacle to the circular economy. PropLS-scholarship seeks to circumvent this obstacle through a more lenient interpretation of the doctrine of accession.

Energy efficiency serves sustainability because it reduces the amount of electricity and heat needed to meet housing needs. However, energy efficiency also requires insulation material made from natural resources, and more efficient housing may, through lower energy expenses and/or a good conscience, induce psychological or economic rebound effects resulting in other

unsustainable behaviour.⁶² Appealing as the circular economy might be, the idea of a completely circular economy should be taken with a pinch of salt. Circularity does reduce or even eliminate the extraction of a certain material, but it requires a lot of energy.⁶³ Depending on how these considerations play out on regeneration rates and on how different natural resources – specifically the re-used materials and the energy source – are weighed, the circular economy and energy efficiency efforts might still consume natural resources faster than they regenerate.

Even though the circular economy is an improvement compared to the current linear economy, the criteria of promoting energy efficiency and the transition to the circular economy thus do not necessarily pursue strong sustainability. However, at least they adhere to weak sustainability.

In terms of notions of a sustainable future, neither energy efficiency nor the circular economy abandons a competition- and growth-based economic order. While energy efficiency appears ideologically neutral, the circular economy makes use of the market economy by creating an economic incentive for producers, who remain the owners of their products, to manufacture more durable products than in a linear economy.⁶⁴ Although the circular economy would be essential to reducing consumption in the course of a Transformation, its dominant notion rather appears to be a Modernisation of liberal democracy and the capitalistic market economy.

16.3.4 Concluding Observations

On the bright side, the presented criteria enable property-law researchers to assess and promote sustainable property law with a focus on specific cases instead of aggregations. In this way, PropLS-research need not employ economic modelling or other techniques with which lawyers tend to be unfamiliar. PropLS-researchers should, of course, still try to take into account aggregate effects where that is possible, for instance, based on already existing insights from other disciplines. The drawback is that these criteria lead a life of their own and PropLS-research is likely not to question the extent to which they actually contribute to sustainability at a global scale. For instance, too many renewable energy installations may lead to an over-extraction of the required natural resources. To some extent, this abstraction from the ‘unsustainable side’ of a criterion seems necessary to make PropLS-research possible.

Moreover, the presented criteria do not all pursue the same concept of sustainability. The approaches pursuing strong sustainability and Transformation incorporate the need for restraining overall consumption and seek to adjust property law and doctrine accordingly.⁶⁵ By contrast, the approaches pursuing weak sustainability and Modernisation seek to substitute less extractive techniques for highly extractive techniques such as fossil fuels but do not necessarily foresee a reduction of consumption. Both approaches promote progress compared to the *status quo*, but only the approaches pursuing strong sustainability and Transformation are certain not to diminish the natural capital in question. Finally, one criterion relies on the coercive power of the State and may increasingly reflect a sustainable future marked by Control.

There may be various reasons for this divergence. Property-law research within a national context, such as the research on accession, is often inspired by problems encountered by companies and other actors in legal practice, a practice still dominated by growth-seeking enterprises, private ownership and other institutions that encourage extraction. Less aligned with practice is more theoretical research, such as the research on the Commons, which pursues strong sustainability and Transformation. Another reason may be the belief or non-belief that technological innovation and its diffusion can completely de-couple economic development from the unsustainable consumption of natural resources and thereby save the planet.⁶⁶

16.4 A Plea for an Inclusive Field of Property Law and Sustainability

Property Law and Sustainability pursues a normative goal through property-law systematisation and reform, that of a sustainable economy and society. This goal is entrenched in national legal orders, for example, through constitutional clauses on a right to a healthy environment,⁶⁷ and international law.⁶⁸ However, for both the definition of sustainability and sustainability-promoting criteria and goals for its research, PropLS depends upon insights on sustainability from other disciplines such as economics and sociology. This appropriate humility on the part of legal researchers makes this field inherently interdisciplinary. However, interdisciplinarity plants the seed of divisions over what sustainability actually means, exacerbated by the fact that there is not one discipline called ‘sustainability research’ and that diverse disciplines contribute to our understanding of what is sustainable. Do diverging definitions of ‘sustainability’ have to lead to a split between different strains of PropLS-research? Can PropLS be exclusively claimed by strains of research pursuing strong sustainability and Transformation or those aiming at weak sustainability and Modernisation?

This contribution pleads that this is neither needed nor desirable. Even scholarship pursuing weak sustainability and/or Modernisation moves in the right direction and its impact on practice improves the current situation. Moreover, a sense of belonging to a certain field of research enables an exchange of thoughts and collaboration, which would otherwise be hampered by walls between different fields. Exchange and collaboration can be very fruitful because the strains of research employing different criteria often address the same or similar research questions. For instance, researchers interested in facilitating renewable energy and those working on the circular economy both encounter the doctrine of accession as a stumbling block. Also, an inclusive field allows research pursuing strong sustainability and Transformation to inspire researchers using other criteria and diffuse more easily into mainstream practice due to the stronger ties of scholars pursuing weak sustainability and Modernisation with practice.

To be sure, diverging notions of sustainability or sustainable futures are not the only stumbling block towards an inclusive field of PropLS. In civil-law jurisdictions, the division of private law and public law can hinder fruitful research due to a lack of knowledge of the respective other area and little exchange between them. An important example would be the relationship between the owners of neighbouring properties. While under private law, neighbour law and the doctrine of abuse of ownership play an important role, public law is the source of emission standards and zoning plans. Moreover, what is often unclear is the relationship between these branches of law. Evaluating and promoting the sustainability of property law in this field is thus all but impossible without an intra-disciplinary analysis of both private-law and public-law aspects. The wall between private law and public law must finally fall.

Another challenge to a unified field is the boundary between legal systems. Equipped with the functional method of comparative law,⁶⁹ PropLS-researchers already compare potential obstacles to a more sustainable economy and society in order to borrow insights and arguments that can help make property law more sustainable in one’s own legal system.⁷⁰ This is fairly easy as long as jurisdictions share the same societal problems and feature similar legal concepts, such as the doctrine of accession in Belgium and the Netherlands. However, what makes comparisons in this field particularly challenging is that in each legal system, the sources on the sustainability of property law lie scattered in different branches of property law and that the tools to achieve that goal differ in nature. In some legal systems, the very notion of private ownership may be flexible enough to incorporate obligations to promote sustainability, as the Green Property theory from the United States suggests.⁷¹ In other legal systems, PropLS-researchers may have

to turn to the Constitution to impose obligations on owners, because of an inflexible concept of ownership.⁷² PropLS-research thus requires dealing with sources of diverging status in each legal system. Also, the impact of these sources and the reach of the tools employed to promote sustainability vary considerably. The work on apartment rights, the doctrine of accession, or limited property rights focuses on technical property-law rules in legislation or common law. It has a significant but determinable impact within a limited area. By contrast, the reach of the concept of ownership, constitutional provisions, and the doctrine of abuse of ownership is by far greater but also more uncertain. At a conceptual level, comparative PropLS-research can identify and categorise these different layers of property law at which sustainability is promoted. *Akkermans*, for instance, distinguishes between fundamental principles of property law, ground rules, and technical rules.⁷³ On top of that, PropLS-research aims to make practical proposals to improve the sustainability property law in each legal system. To achieve this goal, PropLS-research must demonstrate the ability to translate and integrate the insights from foreign sources into the language and correct layers of one's own property-law system. An example of this ability is the integration of insights from the United States property theory into the civil-law doctrine of abuse of ownership in PropLS-research.⁷⁴

While overcoming these stumbling blocks to a unified field, PropLS-scholars also need to work together to address urgent methodological issues in the field of Property Law and Sustainability. Hitherto under-researched, the following crucial issues and respective questions need to be raised and addressed in PropLS-research

- 1 Criteria as an operationalisation of sustainability: how from a definition of sustainability do we deduce reliable criteria for our research?
- 2 Law as an obstacle to a more sustainable economy and society: how do we determine whether a particular rule is detrimental to a sustainable economy and society?
- 3 Adjustments to the law to promote a sustainable economy and society: how do we make profound proposals to change doctrine or legislation that enhance sustainability, without an excessive impact on other public or private interests?

Answers to these questions fall outside the scope of this contribution. In Belgium and the Netherlands, some PropLS-scholars have made a modest start to answer these questions.⁷⁵ All PropLS-scholars should contribute to this methodological debate to help shape a high-quality and productive field of Property Law and Sustainability.

Notes

- 1 Björn Hoops holds the Chair of Private Law and Sustainability at the University of Groningen and is Marie Curie Fellow at the University of Turin from April 2022 to March 2024. This contribution seeks to give a partial theoretical underpinning for the project 'Private Law and the Energy Commons'. This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 101024836. The author expresses his gratitude to the two anonymous peer reviewers for their valuable suggestions and the members of the ProSus research network for inspiring exchanges. All remaining errors are the author's alone.
- 2 G. Hardin, 'The Tragedy of the Commons' (1968) 162 *Science* 1243–1248.
- 3 E. Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press 2015).
- 4 F. Capra and U. Mattei, *The Ecology of Law: Toward a Legal System in Tune with Nature and Community* (Berrett-Koehler Publishers 2015); U. Mattei and A. Quarta, *The Turning Point in Private Law: Ecology, Technology and the Commons* (Edward Elgar Publishing 2018). Cf. P. Degens, 'Towards Sustainable

- Property? Exploring the Entanglement of Ownership and Sustainability' (2021) 60 (2) *Social Science Information* 209.
- 5 Section 12 Te Urewera Act 2014.
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