Forthcoming, Research Handbook on Climate Justice

Equity and justice in climate change law and policy: a role for benefit-sharing

ANNALISA SAVARESI and KIM BOUWER

ABSTRACT

A wealth of climate justice literature tackles complex questions of need, capability and historical responsibility, which admit of no easy resolution. While the debate on burden sharing in multilateral climate governance continues in negotiations on the rulebook of the Paris Agreement, fertile ground already exists to consider whether climate change response measures are consistent with justice considerations, or reinforce existing inequalities. This chapter explores the use of benefit sharing to support the achievement of equity and justice in climate change governance. The concept of benefit-sharing is commonly deployed across areas of environmental law and policy to allocate advantages derived from the sustainable use and conservation of natural resources and related traditional knowledge. This concept is increasingly used in climate change law and policy, at the national, international and transnational level. This chapter considers how benefit-sharing has been used thus far, as well as how it may be more systematically used to carve out a space to better embed equity and justice considerations into climate change law and policy.

1. Introduction

The term climate justice is commonly used to refer to corrective and distributive justice considerations associated both with the impacts of climate change and of climate change response measures. At the international level, climate change law inherently seeks to address the distribution of resources for climate change mitigation and adaptation, and the allocation of shares in a global carbon budget. Solving the climate problem demands solutions to global distributive justice questions — most notably, those concerning the transfer of capacity, finance and technologies to tackle climate change — that are acceptable to all concerned. The debate on climate justice is thus intrinsically linked with (although not limited to) that on inter-state equity, and ultimately revolves around how to share the burdens associated with a global transition towards low-carbon societies, as well as of coping with a changing climate.

There is however another, less explored equity dimension inherent to climate change governance, which has to do with how the advantages and disadvantages of specific climate change response measures are allocated. When climate change response measures, such as incentives for forest carbon conservation, are adopted in a given state or region, there will inevitably be winners and losers. For example, those previously enjoying enfettered access

^{**} This article is prepared under and in service to The Benelex Project: Benefit-sharing for an equitable transition to the green economy at the Strathclyde Centre for Environmental Law and Governance, University of Strathclyde. The project is generously funded by a grant from the European Research Council. The authors thank the tireless project team and advisors, and the reviewers, for their helpful comments on earlier versions of this article.

¹ See e.g. (Caney, 2009; International Bar Association, 2014; Lyster, 2016; Soltau, 2009; Thorpe, 2014)

to forest products may be excluded, whereas others may receive payments to preserve forest ecosystems, including seeking optimisation of their carbon storage potential.

The notion of benefit-sharing has been increasingly deployed in contexts such as these to allocate advantages derived from the adoption and implementation of climate change response measures. This use is far from unique to climate change governance. Indeed, the concept of benefit-sharing is widely deployed in the context of law and policy on use and conservation of natural resources and related traditional knowledge at the international, transnational, national and subnational levels. While benefit-sharing is not explicitly mentioned in climate change treaties, benefit-sharing requirements have increasingly been used as a means to compensate, reward and involve various sets of stakeholders in climate change adaptation and mitigation activities at the national and subnational levels.

In this chapter, we consider how the concept of benefit-sharing is or might be used to achieve equity and fairness in climate change governance. After a short introduction on the concept of benefit-sharing, we explore its potential contribution to the achievement of climate justice. We therefore look at how benefit-sharing has been used in climate change governance thus far, distinguishing between inter- and intra-state relationships. The chapter concludes with suggestions on how the concept of benefit-sharing may be more systematically used to carve out a space to better embed equity and justice considerations into climate change law and policy, both at the inter- and at the intra-state level.

² (Morgera, 2016a)

³ (Savaresi, 2014)

2. The concept of benefit-sharing

Benefit-sharing arrangements are widespread practice in the context of various natural resource management and extractive activities, both to mitigate the negative impacts of, and reduce opposition to and increase the social acceptance of projects. The contours of benefit-sharing obligations are context-specific and depend on the applicable legal frameworks, as well as on industry practices. So in a given context benefit-sharing arrangements may be the result of requirements embedded in national or international law, voluntary guidelines adopted by national and subnational governments, or corporate social responsibility practices. One exception to this rather fragmented picture concerns indigenous peoples, whose right to mutually acceptable benefit-sharing arrangements for extractive activities and developments taking place on their lands is recognised in international law. In relation to other groups, instead, the matter is not as clear-cut and largely depends on the type of activity and the relevant legal frameworks.

A growing number of law and policy instruments refer to benefit sharing with regard to the use of natural resources (e.g. in relation to mining, forestry, and the use of marine resources), environmental protection (biodiversity conservation), and the use of traditional

_

⁴ See for example the analysis in (Dupuy, 2014; Fisher, 2007).

⁵ International Labour Organization's (ILO) Convention no. 169 Concerning Indigenous and Tribal Peoples in Independent Countries 1989, 28 ILM 1382. See also UN Special Rapporteur on the situation of human rights and fundamental freedoms of indigenous peoples, Report U.N. Doc. E/CN.4/2003/90, 66; and 2012 Expert Mechanism: Follow-up report on indigenous peoples and the right to participate in decision-making with a focus on extractive industries (A/HRC/21/52) (A/HRC/21/55) 39. For an analysis, see (Morgera, 2016b)

knowledge.⁶ The concept of benefit-sharing has been significantly developed in biodiversity law, especially in connection with non-human genetic resources.⁷

The practice shows that the notion of 'benefit' encompasses both monetary and non-monetary advantages, and may extend beyond the formal remit of a given project (e.g. concerning the conservation and sustainable use of a natural resource, such as a watercourse or a forest), extending to subjects that are not actively involved in project-related activities. Recent academic work has sought to add normative depth to the concept of benefit-sharing, emphasising the importance of who decides on the nature of benefits, as well as the need for a dialogic, participatory conception of sharing, whereby the determination of benefits should reflect the values and priorities of those participating. This literature suggests that the expression 'fair and equitable' benefit-sharing draws attention to the necessity to protect the rights and interests of vulnerable subjects, as well as the need for inclusion of both procedural and substantive safeguards in relationships regulated by law and that are characterised by power imbalances. In the concept of the service of the safeguards in relationships regulated by law and that are characterised by power imbalances.

The notion of benefit-sharing may also be viewed as a bridge between states' obligations under climate change and human rights law.¹¹ In human rights law, benefit-sharing is a means to ensure that indigenous peoples and traditional communities fairly and equitably share the benefits arising from activities in relation to their lands, territories or resources,

⁶ (Morgera, 2016a)

⁷ (Morgera, 2016a)

⁸ See e.g. (Armeni, 2016; Luttrell et al., 2013)

⁹ (Morgera, 2016a) and (Parks & Morgera, 2015)

¹⁰ (Morgera, 2016a) and (Savaresi, 2013)

¹¹ (Savaresi, 2014)

including their traditional knowledge.¹² State obligations in this area revolve around consultation procedures to establish the benefits that the affected indigenous peoples and traditional communities are to receive; as well as effective remedies for violations of their rights, and just and fair redress for harm resulting from activities affecting their lands, territories or resources.¹³

The relationship between climate change and human rights law has been at centre of much focus in recent years. ¹⁴ Over the last decade the Human Rights Council has increasingly drawn attention to the potential of human rights obligations, standards and principles to 'inform and strengthen' climate change law- and policy-making, by 'promoting policy coherence, legitimacy and sustainable outcomes'. ¹⁵ The Council has issued resolutions calling upon states to 'integrate, as appropriate, human rights in their climate actions at all levels.' ¹⁶ This nexus is particularly important, as the implementation of climate response measures has amply demonstrated that they risk creating perverse incentives to violate human rights. ¹⁷ In order to tackle this concern, the Preamble to the Paris Agreement acknowledges that, whenever parties take action to address climate change, they should 'respect, protect and consider their respective obligations on human rights'. ¹⁸ The Paris Agreement's reference to parties' human rights obligations encompasses obligations in

¹² Framework Principles on Human Rights and the Environment, in Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, UN Doc A/HRC/37/59 (24 January 2018), Annex, Framework Principle 15.

¹³ Ibid.

¹⁴ The intersection is explored at length in (Savaresi, 2018)

¹⁵ See the preambles to Human Rights Council, Resolution 10/4, A/HRC/RES/10/4, 25 March 2009; Resolution 18/22, A/HRC/RES/18/22, 17 October 2011; and Resolution 26/27, A/HRC/RES/26/27, 15 July 2014.

¹⁶ Human Rights Council, Resolution 32/33, A/HRC/RES/32/33, 18 July 2016; and Resolution 35/20, A/HRC/RES/35/20, 7 July 2017.

¹⁷ As noted e.g. in Ole W Pedersen, 'The Janus-Head of Human Rights and Climate Change: Adaptation and Mitigation' (2011) 80 Nordic Journal of International Law 403.

¹⁸ Paris Agreement, preamble.

treaties they have ratified already, or may ratify in future. By forging an explicit link with human rights instruments, the Paris Agreement's preamble reaffirms states' duty to respect, promote, and take into consideration their existing human rights when they adopt measures to tackle climate change and its impacts. ¹⁹ This duty encompasses benefit-sharing arrangements, at least in as far as indigenous peoples and traditional communities are concerned.

While the debate on burden sharing in multilateral climate governance continues in negotiations on the rulebook of the Paris Agreement, fertile ground already exists to ensure that climate change response measures are consistent with justice, and do not reinforce existing inequalities. This chapter therefore considers how benefit-sharing has been used so far, commenting on its potential to be systematically used to carve out a space to better address equity and justice considerations in climate change law and policy.

3. Benefit-Sharing in the Climate Regime: The Story Thus Far

This section looks at how benefit-sharing arrangements have been used thus far in climate change law and policy to tackle equity and justice questions arising at the intra- and interstate levels. These are discussed in that order.

¹⁹ (Savaresi, 2018)

a) Intra-state benefit-sharing

Law and policy at the national and subnational level increasingly use benefit-sharing arrangements to mitigate the negative impacts of, reduce opposition to and increase the social acceptance of, climate change response measures.²⁰ Law and policy on forest uses and renewable energy generation are cases in point and are considered here in further detail.

Forest uses

In the last decade, international climate change law has played an important role in coordinating 'bottom up' efforts²¹ to reduce forest loss and enhance forest cover in developing countries, in the context of so-called REDD+ policies. As with any other climate change response measures, the adoption of measures to stimulate greater forest carbon sequestration is laden with complex equity questions, associated with the changes to extant forest governance arrangements.²² While forest conservation is doubtlessly a desirable outcome, the livelihood of many poor in developing countries greatly depends on the extraction of forest resources.

To seek the protection of both vital ecosystems and vulnerable people, guidance adopted by parties to the United Nations Framework Convention on Climate Change (UNFCCC)²³ – and

²⁰ (Savaresi, 2014)

²¹ On the bottom up nature of REDD+, see (Savaresi, 2016a)

²² As suggested in (Savaresi, 2012)

²³ This guidance is included in a set of decisions adopted by the conference of the parties to the UNFCCC between 2007 and 2015. These decisions are collected in (UNFCCC Secretariat, 2016)

subsequently referenced in the Paris Agreement ²⁴ – includes specific social and environmental safeguards. ²⁵ These safeguards request that REDD+ activities promote and support the participation of relevant stakeholders; respect the knowledge and rights of indigenous peoples and local communities; and, more generally, enhance 'social benefits'. ²⁶ The interpretation of these safeguards depends on domestic law, as well as on states' international obligations. ²⁷

While REDD+ safeguards do not explicitly require benefit-sharing arrangements, these are in practice routinely used as a means to designate who gets rewarded for REDD+ activities.²⁸ Evidence from practice suggests that the negotiation of benefit-sharing arrangements has at times facilitated 'unprecedented' opportunities of dialogue with stakeholders on the ground.²⁹ However, so far benefit-sharing arrangements have predominantly focused on revenue-sharing arrangements, rather than on genuine participation in decision-making. Decision-making on benefit-sharing reportedly tends to be dominated by governmental agencies and donors, with limited participation from traditional forest stewards, such as indigenous peoples.³⁰ The inclusion of the poor and most vulnerable remains a great challenge, together with the mitigation of the negative impacts that they may suffer as a

²⁴ Paris Agreement, Article 5.2.

²⁵ Decision 1/CP.16, Cancún Agreements, UN Doc FCCC/CP/2010/7/Add.1, Appendix I, para. 2.

²⁶ Ibid.

²⁷ (Savaresi, 2016b)

²⁸ As evidenced for example in (Pham et al., n.d.; Wong Grace Yee et al., 2017)

²⁹ (Lee & Pistorius, 2015, p. 16)

³⁰ (Pham et al., n.d., p. 21)

result of REDD+ activities.³¹ An inclusive approach to benefit-sharing has been described not only as 'a good thing to do,' but also as 'essential for achieving optimal outcomes'.³²

Renewable energy

Very similar considerations apply to renewable energy generation, where benefit-sharing practices often build upon those developed in the extractive and mining sectors, with local communities living in the vicinity of a project receiving various economic and non-economic advantages from project developers. The widespread practice of 'benefit-packages' typically entails monetary payments per capacity installed,³³ but developers may also provide other benefits, such as electricity at discounted prices or grants to support energy efficiency.³⁴ The practice of offering shares in projects developed by commercial operators may in and of itself be viewed as a means to share economic benefits with local communities and to involve them in local energy governance.³⁵ Project developers may furthermore offer local communities non-monetary benefits, such as the development of common facilities for recreation or education.³⁶ Such 'benefits' raises the question of the extent to which community benefits may become a means for the provision of public services, which should reach communities regardless of the development of renewable energy capacity.³⁷

³¹ (Luttrell et al., 2013, p. 51)

³² (Forest Dialogue Secretariat, 2014)

³³ See for example Scottish Parliament Brief, Renewable Energy: Community Benefit and Ownership, 2012, 13.

³⁴ See for example: Vattenfall, Wind Energy: Exploring the Benefits to Your community, Available at: https://corporate.vattenfall.co.uk/globalassets/uk/projects/nocton-fen/community investment packages.pdf

³⁵ (McHarg, 2016, pp. 301–302)

³⁶ (Barrera-Hernandez, Barton, Godden, Lucas, & Rønne, 2016, p. 8)

³⁷ As suggested for example in (Wynberg & Hauck, 2014)

In recent years renewable energy generation policies have progressively shifted away from treating communities as passive recipients of benefits, and towards promoting 'ongoing social contract(s) with society'38 and 'genuine two-way street and a fair exchange(s) rather than a token payment representing a small portion of profit'.39 Local residents may thus be involved in the determination of what benefits they receive, to various degrees. The practice of so-called 'community protocols' has emerged as a means to empower communities in the context of their relations with developers, as well as authorities.40 Intermediaries reportedly play an important role in the design of model templates for community protocols and, more generally, in engendering community capacity to negotiate benefits.41 Some law-makers have developed guidelines on community benefits.42 There is however a great deal of variation in practice amongst states, and even within the same

This evolution in the approach to benefit-sharing in climate change response measures aligns with developments observed in other areas of environmental law and policy. Yet, benefit-sharing arrangements still tend to be perceived as a bribe to secure project approval and/or minimize public resistance from local communities.⁴⁴ And while some literature points to opportunities associated with greater institutionalization of benefits – for example

³⁸As reported in ClientEarth, 'Community Power Report' (ClientEarth 2016)

http://www.clientearth.org/reports/community-power-report-250614.pdf> accessed 5 June 2017, 123.

³⁹ See for example Scottish Parliament's Economy, Energy and Tourism Committee, Report on the achievability of the Scottish Government's renewable energy targets, SP Paper 220, 2012, 243.

⁴⁰ See (Parks, 2016)

⁴¹ As noted for example in (Bristow, Cowell, & Munday, 2012, p. 1115).

⁴² As noted for example in (Cowell, Bristow, & Munday, 2011).

⁴³ See the review of practice in (Savaresi, 2017).

⁴⁴ Se e.g. (Walker, Russel, & Kurz, 2017).

by means of systematic standardised payments, decided by independent authorities ⁴⁵ – as well as with their framing in more positive terms in policy parlance, ⁴⁶ evidence emerging from early movers does not necessarily corroborate this proposition. ⁴⁷

b) Inter-state benefit-sharing

Benefit-sharing arrangements in the global governance of climate change feature both on an inter-state basis but also with respect to the interactions between agencies at the transnational level.⁴⁸ The actualisation of benefit-sharing is underdeveloped at an inter-state level, there is value in reflecting on its role. Clear international norms of fair and equitable benefit sharing could provide a useful conceptual lens through which to examine flows of finance and other public goods. In addition, international law obligations could ensure that benefit-sharing arrangements at lower levels of governance are informed by concepts of fairness and equity, subject of course to what is permitted by local law and patterns of practice.⁴⁹

The distribution of climate finance and transfer of climate technologies under the climate regime are areas where such enquiries could be relevant. These mechanisms are of heightened importance in supporting developing countries to achieve the ambition outlined in their nationally determined contributions.⁵⁰ Clear norms at international level in this area

⁴⁵ Ibid.

⁴⁶ See for example (Rudolph, Haggett, & Aitken, 2017, p. 10)10.

⁴⁷ (Jørgensen, 2017)

⁴⁸ (Savaresi, 2014)

⁴⁹ (Parks, 2016)

⁵⁰ See e.g. (de Coninck & Sagar, 2017) and (Zahar, 2016)

would ensure that, when introduced, benefit-sharing arrangements complied with established principles. While this is not the place for an indepth discussion of what this might entail, in the following the idea of 'sharing' is emphasised, as an ongoing, process-based activity, in contrast to a one-directional delivery, where one party might have full control.

Climate finance

The adoption of the Paris Agreement has stimulated discussion in response to new urgency in the distribution and readiness to receive climate finance. Much of the focus in climate finance relates to 'sufficiency, sources, and supply', how to scale up climate finance,⁵¹ or the processes and relationships surrounding the distribution and use of climate finance by state parties and intermediaries established under the climate regime,⁵² such as the Global Environmental Facility (GEF) and the Green Climate Fund (GCF).

While the core focus remains on mobilisation, this renewed attention has created fresh opportunities to examine how tools and mechanisms in climate finance support or undermine the achievement of justice and fairness. As discussed above, benefit-sharing could play a significant role by ensuring that actions taken to implement the Paris Agreement are consistent with equity and justice. Taking this approach has potential to ensure that climate actions might help alleviate, rather than reinforce, existing injustices.

Some intermediary bodies make direct provision for benefit-sharing within the recipient

_

^{51 (}Buchner et al., n.d.)

⁵² For an overview (Thompson, 2016) Table 7.1

state. For instance, the Adaptation Fund expressly requires that activities supported by the Fund 'shall' provide fair and equitable access to the benefits of those activities, in a way that enhances their sustainable development potential, and not worsen existing inequities.⁵³ The provision of substantive and procedural safeguards should go some way to ensuring that projects implemented through the climate funds achieve equitable outcomes. ⁵⁴

Things being as they are, there has been little review or evaluation as to how these obligations are implemented at either a state or fund level.⁵⁵ Most bodies empowered to mobilise and supply climate finance have been subject to questions of their distribution of finance; the reasons for this are varied, but include an absence of equitable reasons for the decisions made in relation to the allocation of finance.⁵⁶ Flows of funding are conceptualised as a unidirectional process and the states in receipt of finance are subject to weak review and reporting mechanisms.⁵⁷

A clear set of principles, agreed at inter-state level, could provide a valuable framework through which parties could establish and assess benefit-sharing arrangements in relation to climate finance. Clear norms could support a strongly equitable approach is taken to benefit-sharing. For instance, adhering to norms and requirements for ongoing dialogue as part of a 'sharing' approach, could go some way to ensuring that climate finance was used in

⁵³ Adaptation Fund Environmental and Social Policy (2013) 2. As highlighted above, some activities under the Adaptation fund may take place at a local or national level.

⁵⁴ Further examples include: The Green Environment Fund environmental policy requires full respect for the rights of Indigenous peoples, which includes the right to 'culturally appropriate economic and social benefits' (GEF Policy on Agency Minimum Standards on Environmental and Social Safeguards (2013 ed.) Criterion 4 – also Minimum requirements 4.8). The GEF policy also acknowledges that benefits received under it can extend beyond receipt of funds (see Minimum Requirement 4.6). The GCF recognizes the need for benefit sharing amongst Indigenous peoples (Green Climate Fund, Guiding Framework and Procedures for Accrediting National, Regional and International Implementing Entities and Intermediaries, Including the Fund's Fiduciary Principles and Standards and Environmental and Social Safeguards (2014), para 39).

⁵⁵ If these are indeed obligations – see Savaresi (n28).

⁵⁶ Discussed in (Yamineva & Kulovesi, 2013)

⁵⁷ (Zahar, 2016)

a way that supported ongoing equitable outcomes.

Climate change technology transfer

The Paris Agreement makes provision for the transfer of technology and capacity building.⁵⁸ Technology transfer is important as 'means of implementation' or support for all states fully to achieve their mitigation and adaptation goals. Contrasted with climate finance, no explicit provision is made for benefit-sharing arrangements to be implemented in connection with the transfer of climate change technologies. However, it may be argued that the use of benefit-sharing concepts can support and inform just and equitable processes in relation to technology transfer.

Substantial work has been done concerning the merits of a partnership-based approach in international climate change technology transfer.⁵⁹ A partnership-based or co-development approach requires an ongoing dialogue between involved parties, and the introduction of formal benefit-sharing obligations could support the development of benefit-sharing within these technology arrangements. Under such arrangements, benefit-sharing could provide both a protective safeguard and a system of active engagement, supporting less powerful parties and ensuring continuing engagement on the uses and development of climate change technologies. Some scholars conceptualise this as a participatory process that

⁵⁸ Articles 10 and 11 respectively; (Rajamani, 2016)

⁵⁹ See (Bouwer, 2018) for a discussion of how the technology needs assessment (TNA) process under the climate regime can go some way towards supporting needs-based achievement of climate technology transfer. The Technology Executive Committee (which conducts the TNAs) does not make any reference to benefit-sharing, but we argue that the approach taken is compatible with the concept of benefit-sharing as an element of the right to science. Also see (Ockwell, Sagar, & Coninck, 2015) and (Sagar, Bremner, & Grubb, 2009)

requires full informed engagement of both parties, while acknowledging that substantive participation may not be achieved in practice.⁶⁰ This of course raises other questions about the scope and potential of international norms fully to inform local-level practice.

Existing cooperation initiatives – such as collaborative centres for climate change research and development that aim to foster innovation and the building of capacity ⁶¹ - reflect this broader thinking, but could benefit from formalised benefit-sharing arrangements. The inclusion of benefit-sharing arrangements in this co-operation could reflect a commitment to protect the rights and interests of all participants, with particular attention to more vulnerable ones. The framing of benefit-sharing as 'fair and equitable' reflects the need for inclusion of both procedural and substantive dimensions of justice in what might otherwise be a very unequal relationship where power and control is entirely vested in one party. ⁶²

4. Benefit-Sharing and the Future of the Climate Regime

The concept of benefit-sharing bears significant potential as a tool, providing both protective procedural safeguards, but also normative substance to relationships and activities within climate change governance. The use of benefit-sharing arrangements potentially stands to avoid the entrenchment of existing inequalities and bring about just and equitable outcomes.

⁶⁰ (Armeni, 2016)415 and (Parks & Morgera, 2015) 356 ⁶¹ (Ockwell & Byrne, 2016)

^{62 (}Morgera, 2016a)

In this chapter, we have discussed the deployment of and potential for the deployment of benefit-sharing in climate change law and policy. In so doing, we have drawn on theoretical approaches to benefit-sharing in human rights and biodiversity law. Far from being only an expedient term of reference, international legal obligations under human rights and biodiversity law provide a template for a more normatively developed approach to benefit-sharing. This notion encompasses multiple streams of diverse benefits, and requires a common understanding of what the benefits at stake are and how they ought to be shared. In this connection, benefit-sharing is better understood as a process, rather than a one-off exercise, of good-faith engagement among different actors, laying the foundations for a long-term 'partnership'. 63 This understanding of benefit-sharing goes beyond existing practice, and there is ample scope for further work to be undertaken to develop concepts of benefit-sharing in relation to climate change law and policy. This raises questions about the potential for mutually supportive interpretation between the climate change regime, and existing benefit-sharing practices under human rights and biodiversity law.

The practice of benefit-sharing at the intra-state level shows that much remains to be done in order to ensure that climate change response measures do not perpetuate or deepen existing injustice. Benefit-sharing practice from biodiversity and human rights law suggests the need for culturally appropriate, good-faith, consensus-building processes, with a view to agreeing on modalities of decision-making, rather than simply giving them a share in profits.⁶⁴ As opposed to mere compensation to make up for lost control over resources and

_

^{63 (}Parks & Morgera, 2015)

^{64 (}Parks & Morgera, 2015)

income-generation opportunities, benefit-sharing could provide new opportunities for income generation and continued, and possibly enhanced, control over the use of the lands and resources.⁶⁵

Similarly, we have briefly explored how both explicit benefit-sharing arrangements, and the broader concepts of benefit sharing, could support fair and equitable outcomes at the interstate and transnational level. These approaches have potential to ensure just and equitable outcomes, if properly deployed. Establishing clear principles of benefit-sharing at international level can provide a useful framework both to support the development of, and to establish whether climate change support mechanisms are actualised in a just and equitable manner. As discussed, there is considerable scope for increased attention on developing concepts of benefit-sharing where this is already included as an obligation, but significantly underutilised. In addition, potential exists for benefit-sharing approaches to support equitable practices and outcomes in existing partnership arrangements.

Bibliography

Armeni, C. (2016). Participation in Environmental Decision-making: Reflecting on Planning and Community Benefits for Major Wind Farms. *Journal of Environmental Law*, 28(3), 415–441. https://doi.org/10.1093/jel/eqw021

Barrera-Hernandez, L., Barton, B., Godden, L., Lucas, A., & Rønne, A. (Eds.). (2016).

Introduction. In *Sharing the Costs and Benefits of Energy and Resource Activity: Legal Change and Impact on Communities* (pp. 1–22). Oxford University Press.

-

⁶⁵ (Parks & Morgera, 2015)

- Bouwer, K. (2018). Insights for Climate Technology Transfer from International

 Environmental and Human Rights Law. *Journal of Intellectual Property Rights*,

 (forthcoming).
- Bristow, G., Cowell, R., & Munday, M. (2012). Windfalls for whom? The evolving notion of 'community' in community benefit provisions from wind farms. *Geoforum*, *43*(6), 1108–1120. https://doi.org/10.1016/j.geoforum.2012.06.015
- Buchner, B., Oliver, P., Wang, X., Carswell, C., Meattle, C., & Mazza, F. (n.d.). *Global Landscape of Climate Finance 2017 Climate investment analysis*. Retrieved from https://climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2017/
- Caney, S. (2009). Climate change, human rights and moral thresholds. In S. Humphreys (Ed.),

 Human Rights and Climate Change (pp. 69–90). Cambridge: Cambridge University

 Press.
- Cowell, R., Bristow, G., & Munday, M. (2011). Acceptance, acceptability and environmental justice: the role of community benefits in wind energy development. *Journal of Environmental Planning and Management*, *54*(4), 539–557.

 https://doi.org/10.1080/09640568.2010.521047
- de Coninck, H., & Sagar, A. (2017). Technology Development and Transfer (Article 10). In D. Klein, M. P. Carazo, M. Doelle, J. Bulmer, & A. Higham (Eds.), *The Paris Agreement on Climate Change: Analysis and Commentary*. Oxford University Press.
- Dupuy, K. E. (2014). Community development requirements in mining laws. *The Extractive Industries and Society*, 1(2), 200–215. https://doi.org/10.1016/j.exis.2014.04.007

- Fisher, C. (2007). International Experience with Benefit-Sharing Instruments for Extractive

 Resources. Washington D.C.: Resources for the Future. Retrieved from

 http://www.rff.org/research/publications/international-experience-benefit-sharing-instruments-extractive-resources
- Forest Dialogue Secretariat. (2014). *Country Options for REDD+ Benefit Sharing*. Forest

 Dialogue. Retrieved from

 http://theforestsdialogue.org/sites/default/files/tfdreview_countryoptionsforreddpl
 usbenefitssharing_en.pdf
- International Bar Association. (2014). Achieving Justice and Human Rights in an Era of

 Climate Disruption. London. Retrieved from

 http://www.ibanet.org/PresidentialTaskForceClimateChangeJustice2014Report.aspx
- Jørgensen, M. L. (2017). Functioning of Compensation Mechanisms Regarding Local

 Acceptance of Wind Energy Projects. Presented at the European Environmental Law

 Forum Annual Conference, Copenhagen, Denmark.
- Lee, D., & Pistorius, T. (2015). *The Impacts of International REDD+ Finance*. Climate and Land Use Alliance.
- Luttrell, C., Loft, L., Fernanda Gebara, M., Kweka, D., Brockhaus, M., Angelsen, A., & Sunderlin, W. D. (2013). Who Should Benefit from REDD+? Rationales and Realities. *Ecology and Society*, 18(4), 52–70.
- Lyster, R. (2016). Climate Justice and Disaster Law. Cambridge University Press.
- McHarg, A. (2016). Community Benefit Through Community Ownership of Renewable

 Generation in Scotland: Power to the People? In L. Barrera-Hernandez, B. Barton, L.

- Godden, A. Lucas, & A. Rønne (Eds.), *Sharing the Costs and Benefits of Energy and Resource Activity* (pp. 297–315). Oxford: Oxford University Press.
- Morgera, E. (2016a). The Need for an International Legal Concept of Fair and Equitable

 Benefit Sharing. *European Journal of International Law*, *27*(2), 353–383.
- Morgera, E. (2016b, December 20). *Under the Radar: Fair and Equitable Benefit-Sharing and*the Human Rights of Indigenous Peoples and Local Communities Related to Natural

 Resources. SSRN Scholarly Paper, Rochester, NY. Retrieved from

 https://papers.ssrn.com/abstract=2887803
- Ockwell, D., & Byrne, R. (2016). Improving technology transfer through national systems of innovation: climate relevant innovation-system builders (CRIBs). *Climate Policy*, *16:7*, 836–854.
- Ockwell, D., Sagar, A., & Coninck, H. de. (2015). Collaborative research and development (R&D) for climate technology transfer and uptake in developing countries: towards a needs driven approach. *Climatic Change*, *131*(3), 401–415. https://doi.org/10.1007/s10584-014-1123-2
- Parks, L. (2016). Challenging Power Asymmetries from the Bottom Up? Community Protocols and the Convention on Biological Diversity at the Global/Local Crossroads (SSRN Scholarly Paper No. ID 2884965). Rochester, NY: Social Science Research Network.

 Retrieved from https://papers.ssrn.com/abstract=2884965
- Parks, L., & Morgera, E. (2015). The Need for an Interdisciplinary Approach to Norm

 Diffusion: The Case of Fair and Equitable Benefit-sharing. *Review of European,*Comparative & International Environmental Law, 24(3), 353–367.

- Pham, T. T., Brockhaus, M., Wong, G., Dung, L. G., Tjajadi, J. S., Loft, L., ... Mvondo, A. C. (n.d.). Approaches to benefit sharing: A preliminary comparative analysis of 13 REDD+ countries. Retrieved October 10, 2014, from http://www.cifor.org/library/4102/approaches-to-benefit-sharing-a-preliminary-comparative-analysis-of-13-redd-countries/
- Rajamani, L. (2016). The 2015 Paris Agreement: Interplay Between Hard, Soft and Non-Obligations. *Journal of Environmental Law*, *28*, 337–358.
- Rudolph, D., Haggett, C., & Aitken, M. (2017). Community benefits from offshore renewables: The relationship between different understandings of impact, community, and benefit. *Environment and Planning C: Politics and Space*, 2399654417699206. https://doi.org/10.1177/2399654417699206
- Sagar, A., Bremner, C., & Grubb, M. (2009). Climate Innovation Centres: A partnership approach to meeting energy and climate challenges. *Natural Resources Forum*, 33, 274–284.
- Savaresi, A. (2012). The Human Rights Dimension of REDD. *Review of European Comparative*& International Environmental Law, 21, 102–113.
- Savaresi, A. (2013). The International Human Rights Law Implications of the Nagoya

 Protocol. In E. Morgera, M. Buck, & E. Tsioumani (Eds.), *The 2010 Nagoya Protocol*on Access and Benefit-sharing in Perspective (pp. 53–81). Leiden: Martinus Nijhoff.
- Savaresi, A. (2014). The Emergence of Benefit-Sharing Under the Climate Regime. a

 Preliminary Exploration and Research Agenda. SSRN Scholarly Paper, Edinburgh Law

 School. Retrieved from

 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2524335

- Savaresi, A. (2016a). A Glimpse into the Future of the Climate Regime: Lessons from the REDD+ Architecture. *Review of European, Comparative & International Environmental Law*, 25(2), 186–196. https://doi.org/10.1111/reel.12164
- Savaresi, A. (2016b). The Legal Status and Role of Safeguards. In C. Voigt (Ed.), Research

 Handbook on REDD+ and International Law (pp. 126–156). Cheltenham, UK: Edward

 Elgar Publishing.
- Savaresi, A. (2017). *Justice and the Energy Transition: Early Lessons from Community***Renewables* (SSRN Scholarly Paper No. ID 3027695). Rochester, NY: Social Science

 **Research Network. Retrieved from https://papers.ssrn.com/abstract=3027695
- Savaresi, A. (2018). Climate Change and Human Rights: Fragmentation, Interplay and
 Institutional Linkages. In S. Duyck, S. Jodoin, & A. Johl (Eds.), *Routledge Handbook of Human Rights and Climate Governance* (pp. 31–43). Routledge, Taylor & Francis
 Group.
- Soltau, F. (2009). *Fairness in International Climate Change Law and Policy*. Cambridge: Cambridge University Press.
- Thompson, A. (2016). The Global Regime for Climate Finance: Political and Legal Challenges.

 In K. R. Gray, C. P. Carlarne, & R. Tarasofsky (Eds.), *The Oxford Handbook of International Climate Change Law*. Oxford University Press.
- Thorpe, T. M. (2014). *Climate Justice. A Voice for the Future*. Houndmills and New York: Palgrave Macmillan.
- UNFCCC Secretariat. (2016). Key Decisions Relevant for Reducing Emissions from

 Deforestation and Forest Degradation in Developing Countries (REDD+). Bonn.

Retrieved from

- http://unfccc.int/files/land_use_and_climate_change/redd/application/pdf/compila tion redd decision booklet v1.2.pdf
- Walker, B. J. A., Russel, D., & Kurz, T. (2017). Community Benefits or Community Bribes? An Experimental Analysis of Strategies for Managing Community Perceptions of Bribery Surrounding the Siting of Renewable Energy Projects. *Environment and Behavior*, 49(1), 59–83. https://doi.org/10.1177/0013916515605562
- Wong Grace Yee, Loft Lasse, Brockhaus Maria, Yang Anastasia Lucy, Pham Thu Thuy,

 Assembe-Mvondo Samuel, & Luttrell Cecilia. (2017). An Assessment Framework for

 Benefit Sharing Mechanisms to Reduce Emissions from Deforestation and Forest

 Degradation within a Forest Policy Mix. *Environmental Policy and Governance*, 27(5),

 436–452. https://doi.org/10.1002/eet.1771
- Wynberg, R., & Hauck, M. (2014). Sharing the Benefits from the Coast. In R. Wynberg & M.

 Hauck (Eds.), Sharing Benefits from the Coast: Rights, Resources and Livelihoods.

 Claremont, South Africa: University of Cape Town Press.
- Yamineva, Y., & Kulovesi, K. (2013). The New Framework for Climate Finance Under the

 United Nations Framework Convention on Climate Change: A Breakthrough or an

 Empty Promise? In E. J. Hollo, K. Kulovesi, & M. Mehling (Eds.), *Climate Change and*the Law (pp. 191–223). Springer Netherlands. https://doi.org/10.1007/978-94-007-5440-9
- Zahar, A. (2016). The Paris Agreement and the Gradual Development of a Law on Climate Finance. Climate Law, 6(1-2), 75–90. https://doi.org/10.1163/18786561-00601005