4 General Conclusion

4.1 Reflection on the adequacy of the comparative methodology

Despite some challenges related to the scope of the work, this PhD has demonstrated the transnational emergence – or even existence – of CDD, including by exploring its potential and limitations through the use of comparative legal methodologies outlined in the introduction.

The dissertation notably identified due diligence norms across legal systems not only through their names, but above all through their functions and characteristics. Although due diligence norms often bear different names in different legal systems, they share similar criteria, which facilitates their identification using a functional approach. Furthermore, it was established that the assessed domestic liability systems share common roots in Roman law and that international law has developed analogies with these domestic tort law principles[2030]. These shared foundations across legal systems help to identify and understand due diligence norms.

Part 1 thus demonstrated the transnational applicability of the concept to climate change within international law, human rights law, and domestic laws in European jurisdictions and the United States, ultimately applying to both public and private actors. The growing number of judgments affirming or hinting at the existence of CDD (2017–2025)[2031] also confirms with much more authority the applicability of general norms such as due diligence to climate change (see for example, the *KlimaSeniorinnen* outcome by the ECtHR and internationally the ICJ advisory opinion). In the view of the author of this dissertation, it is not surprising that other domestic and international courts have confirmed the principles found in *Urgenda*, given the preexistence and ubiquity of due diligence, and the generality of the problem.

Next, Part 2 fleshed out transnational trends in comparative case law on the extent to which Courts are ready to enforce CDD. Courts across the world have accepted the enforcement of CDD under the following conditions:

2030 See subsection 0.2 of the introduction.
2031 The "inflation" of cases and "climate-related news" was challenging to grapple with.

– If the framing of the injury reflects the individual and collective dimensions of the harm, namely global warming, bearing in mind that its aggravation and scientific progress make the injury easier to demonstrate;
– If causation and the attribution of legal obligations are grounded in the concept of shared responsibility;
– If the requested redress of CDD is either enshrined in *specific* legislation, or if the interpretation of *general* CDD reflects scientific and institutional consensus, either by providing precise injunctions or by leaving a margin of appreciation.

The analysis in Part 2 and its main results illustrate the conditions under which courts are ready to judicially intervene and interpret CDD. They highlight that the judicial system cannot usurp its powers and create norms *ex nihilo*. Nor can courts enforce GHG reduction goals without any flexibility, given the scope of the concrete mitigation measures, which touch upon any aspect of human life and society.

Nonetheless, a line of case law across jurisdictions has previously granted the interpretive primacy over CDD to the political branches, especially with regard to setting overall mitigation ambitions and adopting concrete mitigation measures. Courts in France, Ireland, the United States and the United Kingdom have followed this path. This is particularly problematic in the United States, given the political opposition to climate action, notably during the Trump administration[2032]. Hence, despite the growing – one may even say "consolidated" – recognition of CDD transnationally, the judicial and political situation in the USA sets out a fragmentation. Still, international law and customary CDD bind the USA[2033], even if its political

2032 While this thesis argues that *specific* legislation must aim to implement *general* CDD (otherwise, it faces liability risks – see Part 3), the SCOTUS will unlikely enforce *general* CDD due to its (strong) tendency to give prevalence to the interpretation of the Constitution by Parliament. Additionally, while judicial review of the actions of the US government remains available under US law, the possibility of the review is firstly dependant on the survival of certain laws in Congress (which is unsure given that the Republicans hold there the majority), and then, the breath of the judicial review may be limited given the recent decision *West Virginia v EPA* of the SCOTUS concerning the Clean Air Act (it remains to be seen how this will play out with the Inflation Reduction Act, which provides significant funding to industries for decarbonisation).

2033 See, for instance, ITLOS, *Advisory Opinion on Climate Change and International Law*, 21 May 2024, see especially, § 405.

or judicial branch may continue to oppose or ignore it[2034]. While these circumstances illustrate the limitations of CDD and the law more generally, it is worth recalling that the conduct of the USA during Trump's second term may constitute a serious breach of CDD, which may give rise to secondary obligations, as discussed in Part 3.

Part 3 provides an analysis of further *potentialities* of CDD, namely, historical responsibility, an area where courts have yet to deliver substantial rulings. It presents a *prima facie* and *in abstracto* analysis to know whether private and public Global North actors complied or not with CDD. To do so, the evolution of climate science was considered, and the common criteria of *general* due diligence were applied, implying shared responsibility principles or individual and collective responsibility principles. The assumption is that significant discrepancies between individual action and climate-related consensus on what should be done may constitute breaches of *general* CDD. Given the numerous discrepancies identified, Part 3 concluded that there are as many potential periods of historical responsibility, which likely last until today. These failures could and should be remedied by secondary obligations implying higher mitigation outcomes or contribution to damages, to redress these periods of non-compliance. This higher responsibility in case of historical wrongful conduct is a logical consequence of the breach of the primary obligation of CDD, as it requires acting in *due* time and in accordance with one's means.

The study in Part 3 was enabled by the research done by litigants in several cases seeking responsibility for historical wrongful conduct, which is available on databases such as the "climate case chart". Nonetheless, the counter-assessment for this manuscript was challenging, requiring evaluation of each argument's merit. For example, complaints filed in the United States disregarded the issue of collective responsibility and omitted an analysis of whether the responses of industrial actors were *reasonable* in light of the *foreseeability* criterion. Revisiting this work led to extensive additional research, which may ultimately enable the finding of more plausible instances of breach findings.

2034 I did not research how SCOTUS dealt with international law in its past jurisprudence and the traditional views of conservative judges in this respect, which now form the majority of the Court. Nonetheless, given the recent stances of the Court in climate matters (see *West Virginia v EPA*) and its general willingness to give prevalence to the lawmakers as to the interpretation of the US Constitution and federal statutes in case of lack of clarity (see *Dobbs v Jackson*), SCOTUS would certainly dismiss international *customary CDD* as well if the political branches still object to it (which is the case so far).

In light of the foregoing, the comparative and interdisciplinary methodology employed was well-suited to assessing the existence, limitations, and potentialities of CDD across legal orders.

4.2 Reflection on the usefulness of CDD

The demonstration of the existence of CDD is useful as it counters the argument that there is unlimited freedom in the absence of any specific treaties or other domestic legislation.

As this dissertation showed, CDD *aims to* increase climate action. However, it remains uncertain whether it can truly counter persistent legal and political unwillingness. The following situations will serve as important tests in this regard:

- The implementation of general State CDD in light of the international advisory opinions and the ECtHR's *KlimaSeniorinnen* ruling[2035], particularly since Swiss courts and other European courts (notably in France and the UK) had previously rejected the interpretation of *general* CDD articulated in *Urgenda*, and based on human rights.
- The confirmation and implementation of corporate CDD duties in the current political context, which aims to weaken climate legislation, such as the Corporate Sustainability Due Diligence Directive (CSDDD). In fact, the removal of Article 22 of this latter Directive, which formerly required the establishment and implementation of climate transition plans, illustrates this trend. The ongoing legal proceedings in this area, such as those against Shell and TotalEnergies, among others, should provide further clarification on the existence of the general CDD duty (see section 2.3.3).
- The broader political backlash against climate policies worldwide[2036] has been reinforced recently by Trump's second election and withdrawal

2035 As a reminder, Switzerland contested the ECtHR decision and claimed to comply with the criteria laid out by the Court shortly after, see Conseil fédéral de la Suisse, "Le Conseil fédéral clarifie sa position sur le verdict de la Cour européenne des droits de l'homme concernant la protection du climat", Berne, 28 August 2024.

2036 Goar M, "Le 'backlash' contre la transition écologique, un nouveau levier du populisme", *Le Monde*, 2025.

from the Paris Agreement in 2025[2037]. This context is a significant challenge for CDD, particularly within the US federal legal system, whose Supreme Court, composed of "conservatives", has shown a strong tendency to defer to the political branches, including for interpreting the US Constitution[2038]. The USA and its federal legal system represent a significant fragmentation risk for global climate mitigation efforts, including CDD.

In this light, the *effective* contribution of CDD to climate action remains unclear. Further empirical research in this respect *could* be insightful, but one should be mindful of the inherent difficulties of linking a ruling to concrete mitigation outcomes[2039]. Against this background, the results of this PhD thesis still highlight the CDD's boundaries and potentialities.

– Assess whether the respective actors meet their voluntary climate-related commitments.

This step enables the intervention by courts to ensure the implementation of *specific* CDD elements, as seen in the USA, Ireland, France, Belgium and the UK[2040]. This type of judicial review may extend to voluntary climate-related commitments, such as those made under the Paris Agreement, as shown in *Urgenda* and *Klimatzaak*[2041]. This thinking could also extend to corporate commitments, as shown in the French *Total Erika* case[2042]. While this remedy *could* increase the effectiveness of *voluntary* measures, the ambition of the underpinned objectives and measures would remain unchecked, although they may be insufficient. This is a significant limit of this type of CDD remedy.

2037 Schonhardt S, "Why Trump's 2nd withdrawal from the Paris Agreement will be different", *Politico*, November 2024; Popli N, "What Happened the Last Time Trump Left the Paris Agreement", *TIME*, January 2025.

2038 Totenberg N, "The Supreme Court is the most conservative in 90 years", *NPR*, July 2022.

2039 Mayer empirically assessed the effective contribution of Urgenda to the reduction of emissions, however, as he admits, his results remain speculative (see Mayer B, "The Contribution of Urgenda to the Mitigation of Climate Change" (2023) 35(2) *Journal of Environmental Law*). In any case, he should carry out further empirical assessment with a broader team to evaluate the impact of climate litigation more generally (see Mayer B, "Call for applications: Real-World Impact of Climate Litigation", 2024).

2040 See above, especially section 2.3.1 of the thesis.

2041 Court of Appeal of Brussels, *Klimatzaak*, 2021/AR/1589, 2022/AR/737 et 2022/AR/891, 30 November 2023.

2042 Cour de cassation, crim., *Erika*, n° 10-82-938, 25 septembre 2012.

– Devise *precise* injunctions based on an interpretation of *general* CDD if a consolidated scientific and political consensus exists.

Interpreting *general* due diligence in light of robust consensus or voluntary commitments could contribute to shaping climate action and law, such as the -25% by 2020 reduction figure found in *Urgenda*. However, issuing this kind of injunction depends on the pre-existence of highly consensual elements to ensure courts do not overstep their powers (see section 2.3.2). These conditions are difficult for plaintiffs to meet. One may even infer that the factual elements in *Urgenda* were almost unique (see subsection 2.3.2.1), as no analogous scientific consensus was established for the upcoming time horizons (2030, 2040 or 2050). Even the outcome in *Klimatzaak* differed from *Urgenda* since the Brussels Court of Appel's injunction was based on the *specific* EU law of -55% by 2030, which had just been adopted, and was still in force – including at the time of writing[2043]. In other words, the consensus in *Klimatzaak* stems from *specific* legislation rather than scientific evidence. These facts regarding the required level of consensus explain the absence of *Urgenda*-type injunctions in other cases, such as *KlimaSeniorinnen*[2044]. The lack of consensus was also a reason for the Court of Appeal in The Hague to overrule the injunction in the *Shell* case (i.e., to reduce emissions by 45% by 2030)[2045]. The same reason also contributed to the dismissal of the *Juliana v USA* case, as subsection 2.3.2.2 of this thesis argues.

– Ensure public and private actors are truly making their best efforts to limit warming to 1.5°C (or at least, well below 2°C).

Allowing courts to review whether key public and private actors are making their best efforts allows for the scrutiny of the implementation of substantive measures. Indeed, if the duty bearers do not plan any significant GHG reductions, courts can find insufficiencies, violations of the law, or "lacunae" as the ECtHR did in *KlimaSeniorinnen*. Indeed, as Maljean-Dubois ar-

2043 Court of Appeal of Brussels, *Klimatzaak*, *op cit*, p 107, § 203.

2044 ECtHR, *Klimaseniorinnen v Switzerland*, no. 53600/20, 9 April 2024, § 657. See furthermore the discussion of the ECtHR's decisions before and after their issuance in subsection 2.3.2.5

2045 Court of Appeal of The Hague, *Milieudefensie v Shell*, C/09/571932 / HA ZA 19-379, 12 November 2024, § 7.111; see as well, the following short commentary: Van Asselt H and Savaresi A, "Corporate Climate (Un)Accountability? Landmark Shell Ruling Overturned on Appeal", *Centre for Climate Engagement, Hughes Hall, University of Cambridge*, 13 November 2024.

gued, "only very significant GHG reduction measures could be considered proportionate"[2046]. This PhD thesis agrees and argues that courts should closely monitor whether systemic actors abide by this standard, and if not, require compliance through injunctive relief as a secondary obligation to address the shortfalls.

Furthermore, monitoring the implementation of *general* CDD obligations *could* prompt stronger reactions from the relevant actors, as this process would publicly expose unlawful emissions gaps and the imposition of potential penalties. However, implementing concrete and substantive mitigation actions would still depend on political willingness, as courts need to provide the duty-bearers with some level of discretion. This is one of the limits of CDD and the law. The assessment of its effectiveness remains largely outside the scope of this thesis.

– Remedying historical wrongful conduct?

Given the manifest lack of adequate climate action these last decades, as the ECtHR has briefly pointed out[2047], judicial bodies should extend their compliance assessments by not only looking at current discrepancies, but also considering potential historical shortcomings. This task would be fully consistent with the courts' judicial functions, as the ICJ has established[2048].

In this regard, Part 3 identified numerous historical responsibilities that persist to this day. If courts reach similar conclusions, they could impose secondary obligations to remedy these failures, which could ultimately reinforce the need for each country to do its fair share. This would further tie the CDD duty to equity and CBDRRC, gradually transforming the principle of historical responsibility from an ethical one to a legal one and implying more stringent obligations for actors in the Global North. These types of secondary obligations could further restrict the margin of appreciation with regard to the required level of ambition, and would ensure that courts do not permit developed states to pursue the same level of ambition

2046 Maljean-Dubois S, "The No-Harm Principle as the Foundation of International Climate Law" in *Debating Climate Law* (2021) p 4.

2047 See ECtHR, *KlimaSeniorinnen et al v Switzerland*, no. 53600/20, 9 April 2024, § 542.

2048 ICJ, *Obligations of States in respect of Climate Change*, Advisory Opinion, 23 July 2025, § 429 *et seq*.

as developing countries, a phenomenon that is structurally unfair and is referred to as "*grandfathering*" in the climate equity literature[2049].

– Award compensation for loss and damage?

In light of the escalating impacts of climate change, securing monetary compensation for the most serious climate-related harms will become necessary. The interim conclusion of Part 3 on historical liabilities proposed potential secondary obligations, including monetary compensation, in a manner compatible with the concept of shared responsibility and CDD. While those findings are speculative, they cannot be ruled out from the outset; on the contrary, they are increasingly more likely after the recent RWE ruling of the Hamm Court of Appeal and the ICJ advisory opinion. The pending "loss and damages cases" or "polluter cases" may provide further answers in this respect.

4.3 Overall conclusion and outlook

CDD exists across legal systems and is, to a certain extent, enforceable. This finding is novel, as no previous work has demonstrated the consolidation of CDD of States and corporations on such a transnational scale. Furthermore, Part 3 showed that case law has certainly not exhausted the possibilities for CDD intervention, as courts could make important contributions when assessing historical shortcomings. The recent judgement of the Hamm Court of Appeal in the RWE case and the ICJ advisory opinion demonstrate the validity and credibility of this approach[2050]. Consequently, this thesis has drawn consequences from a rapidly growing set of legal cases and judicial decisions in Parts 1 and 2, and paved the way for the further development of litigation and case law in Part 3.

Regarding the potential impacts of CDD, while it clearly had the potential to catalyse climate action after the adoption of the Paris Agreement,

2049 Rajamani L, Jeffery L, Höhne N, Hans F, Glass A, Ganti G and Geiges A, "National 'Fair Shares' in Reducing Greenhouse Gas Emissions within the Principled Framework of International Environmental Law" (2021) 21(8) *Climate Policy* p 10; see as well, Knight C, "What is grandfathering?", *Environmental Politics* (2013) 22(3) p. 410–427.

2050 Court of Appeal of Hamm, *Saùl Luciano Lliuya v RWE*, Az. 5 U 15/17, 28 May 2025; ICJ, *Obligations of States in respect of Climate Change*, Advisory Opinion, 23 July 2025.

when reinforcing climate policies was a political priority, the situation changed after 2024. By the time this thesis was completed in 2025, a significant political backlash against climate measures was underway. In this context, CDD is more likely to serve a "damage limitation" function with regard to climate action, helping to prevent the dilution and deregulation of existing climate commitments from becoming too significant[2051].

The reasons for the limited contribution of climate change mitigation to climate action are, among other things, respect for core democratic principles and the separation of powers. Indeed, as a finding of a breach of *general* CDD may be very intrusive, courts are reluctant to intervene in a far-reaching manner, as demonstrated in subpart 2.3. In this regard, it is important to recall that non-compliance can be remedied by a mere court declaration, leaving the defendant with the discretion to achieve compliance at a later date. Alternatively, a return to compliance can be compelled while granting a margin of appreciation. Granting this discretion seems to be the most appropriate way to lean towards compliance without placing an excessive burden on public and individual actors. Nonetheless, the effectiveness of *general* CDD in such a pattern is all but clear and may be difficult to reconcile with other usual court remedies, such as providing monetary compensation, which requires, in principle, clear criteria to calculate the amount of damages. However, given the complexities in the climate area, a simpler approach may be required, such as granting lump sums, as argued in the literature and by the ICJ.

Overall, while CDD is not the ultimate silver bullet or the panacea for climate action, it may remain the most effective legal tool for tackling the climate crisis due to its pervasiveness and pre-existence across jurisdictions. Thanks to this legal concept, courts can fulfil their role and strive to deliver justice in these turbulent times.

2051 See concurring opinion: Eilstrup-Sangiovianni M, Hall N, Vanhala L, Setzer J, Highan I, Van Asselt H, "Reorienting climate litigation in a time of backlash", *Nature Climate Change* (2025).

Glossary of core concepts

Burden sharing: The concept of burden sharing is particularly relevant in the climate context and requires a solution to determine who does what, not only in terms of mitigation, but also in terms of climate finance and loss & damages.

Bottom-up v top down: These concepts are widely used in the context of climate change, especially to define the structure of climate conventions. However, they can also be used in other contexts. While the Kyoto Protocol (KP) took a top-down approach by prescribing precise reductions to specific states, the Paris Agreement (PA) does not define the required conduct precisely. Instead, it recognises specific principles while leaving a margin of appreciation to states. Therefore, it is a bottom-up agreement.

Climate action: It includes all types of "climate measures", such as mitigation (GHG reduction), adaptation (to climate-related impacts), finance for mitigation and adaptation, loss and damage compensation, etc.

Climate adaptation: Measures to adapt to climate-related impacts, including slow-onset events such as sea-level rise.

Climate change: Changes in the global climate system caused by greenhouse gases (GHG) and their global warming effect.

Climate-related adverse effects or impacts: This term refers to changes and adverse impacts in the physical environment resulting from climate change, which have significant deleterious effects on natural and managed ecosystems and on human societies, health and welfare.

Climate cases or lawsuits: Legal proceedings requesting climate action, particularly mitigation. However, climate legal actions can also request further adaptation, finance, and loss and damage.

Climate due diligence (CDD): The CDD duty aims to (i) *identify* the extent to which one can mitigate and (ii) *prevent*, *mitigate* or *cease* climate-related impacts. The first duty to identify (i) climate-related impacts and the mitigation measures is rather of a *procedural* nature (i.e., procedural CDD), while the second dimension to prevent, mitigate or cease (ii) is of a *substantive* nature (substantive CDD). Additionally, CDD can be enshrined in *legi generali* (tort law, human rights law, constitutional provisions – i.e., "general CDD") and specific implementing statutes or regulations of general CDD. Moreover, it can concern public or private actors (State CDD, corporate CDD).

Climate finance: Financial measures generally provided by developed states to developing states to mitigate or adapt to global warming.

Climate loss and damages: The global warming-related effects harming ecological and human interests, potentially requiring compensation in some cases, such as for particularly vulnerable developing countries.

Climate mitigation: Measures and behaviour that aim to reduce greenhouse gases (GHG).

Corporate CDD refers to the climate due diligence obligation of corporate and business actors (see above, definition of CDD).

Direct emissions refer to direct GHG emissions of States or business actors (also known as scope 1 emissions).

Due diligence: One must exercise due diligence (i.e., carefully identify the risks and implement all substantive measures to prevent and mitigate the risks) to avoid causing harm to others or the environment; this basic principle seems to be at the core of any legal system.

Fair share: The extent to which one specific actor needs to mitigate global warming, or to contribute to climate action more generally, according to global equity and fairness considerations.

Free riding: The incentive to refrain from taking climate action due to the perceived minor contribution that can be made to climate mitigation, and the perceived or real disproportionate disadvantage that it causes, mostly economic. The assumption that others are free-riding can lead to further climate inaction. This phenomenon exists in both interstate and private relationships.

General CDD (climate due diligence) is the duty to (i) *identify* the extent to which one can mitigate and (ii) *prevent*, *mitigate* or *cease* climate-related impacts as flowing from *legi generali* (tort law, human rights law, constitutional provisions, customary international law – i.e., "*general* CDD"). This type of duty differs from "*specific* CDD", i.e., *specific* legislation aimed at implementing *general* CDD. For more information on CDD, see its definition just above.

Greenhouse gases (GHG): Emissions released in the atmosphere which have a warming effect, such as carbon dioxide (CO2), methane (CH4), chlorofluorocarbons (CFCs), nitrous oxide, and others.

Indirect emissions: This notion can encompass State territorial emissions if they are released by private actors. Otherwise, States are also linked to extraterritorial emissions, stemming from imports, multinational corporations, etc. Corporate actors' indirect emissions are scope 2 and 3 emissions (see below).

Lex specialis: Special laws may prevail over general laws in particular circumstances, especially if the former is inconsistent with the latter.

Leakage (carbon leakage, emission leakage) and substitution effects: The displacement or replacement of greenhouse gas emissions to another location through the climate mitigation measures of a particular State or company, leading to "substitution effects". According to the IPCC, "Industry has so far largely been sheltered from the impacts of climate policy and carbon pricing due to concerns about carbon leakage and reducing competitiveness (high confidence)". (See IPCC, AR6 (2021-23), WG III, TS, p. 107).

Specific implementation of *general* CDD (climate due diligence): Specific obligations to (i) *identify* and (ii) *prevent*, *mitigate* or *cease* climate-related impacts enshrined in *special laws* (or "specific CDD"). These specific legislations or regulations should, in principle, comply with *general* CDD in international, human rights, or constitutional law. For more information on CDD, see its definition just above.

LTTG: It generally refers to the Long Term Temperature Goal of the Paris Agreement (PA), which sets out an objective to pursue best efforts to limit warming to 1.5°C.

Pathways or scenarios are climate models containing scientific projections of the future showing what measures are needed to keep global warming under a certain threshold, or the manner in which the future can evolve if a certain *status quo* is upheld (also known as descriptive, exploratory, or business-as-usual scenarios).

Procedural CDD (climate due diligence) is the duty to (i) *identify* climate-related impacts and the extent to which one can mitigate those, which is of a *procedural* nature (i.e., procedural CDD). For more information on CDD, see the definition just above.

Regulation of polycentric issues: The usual definition of polycentric is "having more than one centre"[2052]. A polycentric issue or situation may also be defined as follows: one specific "central" problem requires its addressment by a multitude of actors (public and private) and levels of governance. For example, it requires the collaboration between public and private actors, international and domestic organisations, States and municipalities, etc[2053]. Since there is no world government and a corresponding "monocentric" governance body, but a plethora of sovereign governments, the governance issues related to globalisation can be seen as polycentric. Climate change falls in this category, as do numerous other issues related to globalisation, including the regulation of multinational or transnational business enterprises.

Scope 1 GHG emissions: Direct emissions physically stemming from the activities of one company; for more information, see the GHG Protocol.

Scope 2 GHG emissions: Indirect emissions related to the use of energy produced elsewhere; for more information, see the GHG Protocol.

Scope 3 GHG emissions: All other indirect emissions, including those related to the use of products and services (category 11 – such as the use of fossil fuels), or financial services (category 15); for more information, see the GHG Protocol.

State CDD: The climate due diligence obligation of States and other public actors (see above, definition of CDD).

Substantive CDD (climate due diligence): The duty to *prevent*, *mitigate* or *cease* climate-related impacts flowing from *legi generali* (tort law, human rights law, constitutional provisions – i.e., "general CDD") or *special laws* (or "specific CDD"). For more information on CDD, see the above definition.

Substitution effect: See the definition of carbon leakage above.

Systemic and/or framework mitigation cases: Lawsuits aimed at contributing to the reduction of GHGs by taking "a whole-of-system approach" and by challenging the adequacy of mitigation measures from public or private actors (see definition provided by Setzer et al).

2052 https://dictionary.cambridge.org/dictionary/english/polycentric

2053 Ostrom E, "A Polycentric Approach for Coping with Climate Change", Background Paper to the 2010 *World Development Report*, Policy Research Working Paper 5095, 2009.

Systemic integration and harmonious interpretation and fragmentation of the law: When interpreting treaties, Article 31 (3) (c) of the Vienna Convention on the Law of Treaties requires the consideration of the "context" and "[a]ny relevant rules of international law applicable in the relations between the parties." Beyond international law, regional and domestic courts also apply the doctrines of "harmonious interpretation" and "living instrument" or simply consider other legal instruments not directly applicable to their cases if the context so requires; thereby avoiding the fragmentation of the law and enabling the shaping of consistent law beyond borders (see in the glossary, the terms "transnational law" and "global law").

Transnational business enterprises: Large businesses are often organised in a corporate group, comprising many different entities, including parent and subsidiary companies. Those companies may also have value chains, involving the ordering and purchasing of products and services from third-party businesses (subcontractors, suppliers, etc).

Transnational law (global law): The legal principles, statutes, or customs (and even so-called "soft law" principles) which are recognised beyond borders. Transnational law differs from international law (including customary law), as the latter concerns, in principle, interstate relationships, while the former also encompasses the relationships between private actors and private law.