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## Possibility-Driven Design and Responsible Use of AI for Sustainability

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**Title:** Possibility-Driven Design and Responsible Use of AI for Sustainability

**Year:** 2024

**Version:** Published version

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### **Please cite the original version:**

Salo-Lahti, M., & Haapio, H. (2024). Possibility-Driven Design and Responsible Use of AI for Sustainability. In R. Ducato, A. Strowel, & E. Marique (Eds.), *Design(s) for Law* (pp. 205-252). Ledizioni.  
<https://doi.org/10.5281/zenodo.11221501>

## 6. POSSIBILITY-DRIVEN DESIGN AND RESPONSIBLE USE OF AI FOR SUSTAINABILITY

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### *Abstract*

Much of the legal scholarship has focused on past or present problems and issues rather than future possibilities. Practitioners involved in legal drafting have focused primarily on conflicts and legal enforcement, rather than on goals and successful implementation. For scholars and practitioners with a proactive legal and design mindset, goals and possibilities drive the work. In addition to mindset and thinking, doing – implementation – is critical. In this paper, we merge proactive legal thinking with possibility-driven design and move from thinking to doing, using templates, design patterns and AI tools. Our examples illustrate how the responsible use of AI tools can help navigate the new legal landscape of sustainability, and how possibility-driven legal design can be used as a framework for balancing the needs and expectations of people, businesses and society at large. By working in this way, we argue, it is possible to achieve better investment decisions and more sustainable and responsible contracting – ultimately better business and a better society.

### ***1. Proactive Legal Thinking and Doing for Legal Design***

#### *1.1. Combining Possibility-Driven Design with a Proactive Approach to Law*

Design affects all aspects of our society: homes, workplaces, transportation and communication. The challenging years of the pandemic forced a new approach to their design. All designed products, services, environments and systems can influence our wellness and health to a greater or lesser extent.<sup>1</sup> *Positive design* refers to the forms of design that consider the impact of design on the well-being of individuals and societies.<sup>2</sup>

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1 Mariluz Soto, Haiyan Xue and Emmanuel Tseklevs, 'Design for Balance: Wellness and Health' (2022) 7(6) *Base, Diseño E Innovación* 4.

2 Delft Institute of Positive Design, 'Our Mission' <<https://diopd.org/about-us/mission/>> accessed 12 February 2023. According to the Positive Design Manifest, 'positive design is an umbrella term for all forms of design, design research, and design intention that pay explicit attention to the impact of design on the subjective

For a long-time, however, neither doctors nor lawyers focused on well-being. Instead, they mostly provided *ex post* services: curing the sick and solving legal problems.<sup>3</sup> With a new mindset and legal design, law can be used *ex ante*, proactively, to promote what is desirable and prevent what is not. A proactive, possibility-driven approach to law makes it possible to design the legal well-being of people and organisations, rather than focusing on curing their illnesses, such as disputes and litigation. By integrating legal considerations into the design process, it is possible to create solutions that are legally sound, user-friendly, and effective: an excellent example of the promotive dimension of proactive law<sup>4</sup>. In this paper, we merge our proactive law perspective with a positive, possibility-driven design approach. These approaches, we argue, can enrich the understanding and use of legal design.

While the traditional design approach is typically used in situations where a specific problem or set of problems has been identified, the possibility-driven design process can be initiated and guided by the exploration of possibilities even when there are no problems in sight. Rather than focusing on identifying, analysing and addressing problems or challenges, possibility-driven design envisions *what could be*, rather than *what is*. To continue the health analogy, even healthy people can feel better, and it is important to take care of oneself even when one is not sick. While the problem-driven approach focuses on removing and resolving existing problems and preventing future ones, the possibili-

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well-being of individuals and communities'. Positive design is noted to create possibilities: it 'envisions and realizes optimistic futures. Rather than merely reducing people's problems, it offers them opportunities to improve their well-being'.

- 3 It should be noted that in medicine, since the development of genetic studies, there has been a greater emphasis on personalised care and health management. In these respects, legal design could do for law what personalised medicine has done for medicine. For the latter, see, e.g., Laura H Goetz and Nicholas J Schork, 'Personalized Medicine: Motivation, Challenges, and Progress' (2018) 109(6) *Fertility and Sterility* 952.
- 4 The proactive law approach differentiates two aspects of proactivity, one being the promotive dimension (promoting what is desirable; encouraging good behaviour) and the other being the preventive dimension (preventing what is not desirable, keeping legal risks from materialising). See, e.g., Opinion of the European Economic and Social Committee on 'The proactive law approach: a further step towards better regulation at EU level' [2009] Official Journal of the European Union C175/26, para 5.3.

ty-driven design goes beyond this, seeking to design artefacts that ultimately improve people's lives.<sup>5</sup>

Both approaches are important and necessary dimensions of legal design. They are not mutually exclusive and can often be used in combination or in sequence during the design process. We argue for a greater focus on possibilities and ways to use the law and design to achieve new and more ambitious goals, not just to remove barriers and resolve or prevent problems. To turn this vision into action, we need to set goals, navigate the legal landscape, move *from thinking to doing* and improve individuals' self-care by promoting their *financial* and *legal literacy*. This will lead to positive outcomes, such as legal empowerment, optimal functioning, and improved access to justice.<sup>6</sup>

As with all human-centred design, our proposed approach seeks positive solutions that take into account people's different characteristics.<sup>7</sup> This is necessary if we want to empower people and promote their legal self-care. Rather than the passive transfer of information – which is often the case with conventional legal drafting and documents – this requires knowledge of user needs, technological possibilities and the context in which the user will make sense of the information provided.<sup>8</sup> As with design in general, user needs are put at the core, and, where appropriate, technology is used to respond to the needs of different audiences. The Nobel laureate Richard H. Thaler uses the term 'choice architecture' to refer to the practical fact that how the environment in which people make decisions is designed affects the decisions they make.<sup>9</sup> In other

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5 For possibility-driven design, see, e.g., Pia Tamminen, *Possibility-Driven Design in Design-Oriented Communities* (Aalto University publication series Doctoral dissertations 235/2016, 2016) 22.

6 Helena Haapio, Thomas D Barton and Marcelo Corrales Compagnucci, 'Legal Design for the Common Good: Proactive Legal Care by Design' in Marcelo Corrales Compagnucci, Helena Haapio, Margaret Hagan and Michael Doherty (eds), *Legal Design: Integrating Business, Design and Legal Thinking with Technology* (Edward Elgar 2021).

7 For possibility-driven design, see, e.g., Tamminen (n 5) 22.

8 James Utterback, Bengt-Arne Vedin, Eduardo Alvarez, Sten Ekman, Susan Walsh Sanderson, Bruce Tether and Roberto Verganti, *Design-Inspired Innovation* (World Scientific Publishing Co. 2006) 163–164.

9 See, e.g., Richard H Thaler, 'From Cashews to Nudges: The Evolution of Behavioral Economics' (2018) 108(6) *American Economic Review* 1265, 1283. See also Richard

words, design is not about decorating, it has a huge impact on people's decisions and their outcomes.

A search on SSRN or Google Scholar for topics such as proactive law, proactive legal design, legal health or legal well-being will reveal resources related to research, particularly in the Nordic countries, that shows how design can help bring future-oriented legal thinking into practice. Scholars of proactive/preventive law and proactive legal design have for some time seen lawyers not only as fighters or problem-solvers, but also as planners and designers. Moving beyond problem-solving thinking, they have applied foresight and design in their search for desirable futures, legal well-being and the common good. In this paper we build on the work of these scholars and expand our radar to cover two specific areas of application, namely, 1) sustainability disclosure and reporting, and 2) sustainable and responsible business-to-business (B2B) contracting, both of which are highlighted in the new EU sustainability legislation.

### *1.2. Towards Action: Merging Possibility-Driven Legal Design with AI*

According to the Legal Design Alliance (LeDA), legal design is about using human-centred design in the legal domain to facilitate positive results and proactively address issues before they escalate into conflicts and disputes.<sup>10</sup> Based on this definition, legal design aligns with the essence of possibility-driven thinking. Legal design encourages interdisciplinary cooperation and places emphasis on the perspectives of *all* users, not just lawyers, judges, and regulators.<sup>11</sup> In order to 'make the legal system work better for people',<sup>12</sup> legal design has very practical goals. It seeks

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H Thaler and Cass Sunstein, *Nudge: Improving Decisions about Health, Wealth, and Happiness* (Yale University Press 2008).

10 See The Legal Design Alliance, 'What is legal design?' <[www.legaldesignalliance.org/](http://www.legaldesignalliance.org/)> accessed 31 August 2023. LeDA, according to the website, is 'a network of lawyers, designers, technologists, academics, and other professionals who are committed to making the legal system more human-centered and effective, through the use of design'.

11 *ibid.*

12 Michael Doherty, Marcelo Corrales Compagnucci, Helena Haapio and Margaret Hagan, 'A New Attitude to Law's Empire: the Potentialities of Legal Design'

to make the best of law and legal information. In the context of legal information, the core topic of this paper, this includes using information design tools and methods such as visualisation and simplification.<sup>13</sup> Here the perspective is closely linked to the goals of proactive law: enabling and empowering people to make better choices and have clarity about their rights and responsibilities.

This paper highlights the opportunities of legal design by linking it to the promotive dimension of the proactive approach. Moreover, if the aim is to make legal information work better, the focus must be on action. Rather than simply aiming for human-readable information, we should be more ambitious and aim for human-actionable information – something that is actually likely to be used and implemented by the target audience.<sup>14</sup> AI, together with more traditional legal design tools, can help achieve this goal.

The potential of new technologies is well recognised in the field of legal design.<sup>15</sup> In the context of information design, AI tools can assist both readers and writers of legal information. For example, language models such as *GPT-4* and *ChatGPT* can generate simplified summaries of long texts and translate legalese into human language (and vice versa). Our examples here and elsewhere<sup>16</sup> show that AI-powered writing assistants

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in Marcelo Corrales Compagnucci, Helena Haapio, Margaret Hagan and Michael Doherty (eds), *Legal Design: Integrating Business, Design and Legal Thinking with Technology* (Edward Elgar 2021) 1.

13 See, e.g., Marcelo Corrales, Mark Fenwick, Helena Haapio and Erik PM Vermeulen, 'Tomorrow's Lawyer Today? Platform-Driven Legal Tech, Smart Contracts & the New World of Legal Design' (2019) 22(10) *Journal of Internet Law* 3, 9.

14 We are not the first to discuss the need for actionable information in the context of contract-related research. This need has also been discussed and solutions proposed in other contexts, such as privacy and disclosure documents, where complex legal information is involved. See, e.g., Arianna Rossi, Rossana Ducato, Helena Haapio and Stefania Passera, 'When Design Met Law: Design Patterns for Information Transparency' (2019) (122–3) *Droit de la Consommation – Consumenterecht* 79; for contracts, see also Helena Haapio, Robert de Rooy and Thomas D Barton, 'New Contract Genres' in Erich Schweighofer, Franz Kummer, Ahti Saarenpää and Burkhard Schafer (eds), *Data Protection / LegalTech. Proceedings of the 21st International Legal Informatics Symposium IRIS 2018* (Editions Weblaw 2018).

15 Doherty and others (n 12) 1–2.

16 See, e.g., Marika Salo-Lahti, Mikko Ranta and Helena Haapio, 'AI Tools for Sustainability – Actionable Information for Both Humans and Machines' in Erich Schweig-

can also generate helpful first drafts of contract and clause summaries, explanations and reports. As AI tools have certain limitations, which are described later in Section 3.4, we argue that the role of human experts as responsible users of AI is crucial. In this way, AI tools can make a significant contribution to making information more actionable.

### *1.3. Possibility-Driven Design for Better Contracts, Better Business and a Better Society*

Contracts play an important role in business, not only as a legal tool but also as a management tool. Contract negotiation can help to identify and align expectations and clarify objectives, roles and responsibilities. When used in this way, contracts can help reduce the risk of unnecessary misunderstandings and disputes. They can be used proactively to promote what is desirable and prevent what is not.

The proactive approach to law in fact originated in the context of contracting. The first publication in the field was ‘Quality Improvement through Proactive Contracting’ in 1998, written by one of the authors of this paper.<sup>17</sup> In the beginning, the approach was about using contracts to merge quality and risk management with preventive legal thinking in order for the parties to reach their business objectives and prevent problems and negative surprises. The goal, according to *Pohjonen*, was to ensure that the contracting parties achieve their desired results in accordance with their intentions; this requires a thorough examination of their goals and intentions and the ability to create a clear and legally sound framework for their implementation.<sup>18</sup>

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hofer, Jakob Zanol and Stefan Eder (eds), *Legal Informatics as Science of Legal Methods. Proceedings of the 26th International Legal Informatics Symposium IRIS 2023* (Editions Weblaw 2023).

17 Helena Haapio, ‘Quality Improvement through Proactive Contracting: Contracts Are Too Important to Be Left to Lawyers!’ in *Proceedings of Annual Quality Congress (AQC), American Society for Quality (ASQ)*, vol 52 (American Society for Quality 1998).

18 Soile Pohjonen, ‘Johdanto’ [‘Introduction’] in Soile Pohjonen (ed), *Ennakoiva sopiminen – liiketoimien suunnittelu, toteuttaminen ja riskien hallinta [Proactive Contracting – Planning, Implementing and Managing Risk in Business Transactions]* (WSOY Lakitieto 2002) v.

The early adopters of proactive contracting wanted to shift the view of contracts from merely legal tools to operational tools, with a focus on their users, especially people in charge of contract implementation.<sup>19</sup> When searching for ways to create contracts that are both legally and operationally functional and user-friendly, the pioneers of the approach were informed by insights from information design about matters such as people’s literacy proficiencies, reading habits, information processing and overload, understanding and memory. Merging these learnings with proactive legal thinking and putting users at the centre became the mission, and proactive legal thinkers and information designers became natural allies. Proactive contract design was born. It was applied not only in the context of the design of contract documents – their content, structure, language, and presentation – but also in the design of contracting processes and their integration into business processes.<sup>20</sup>

The thinking, tools and methods were tested in a number of projects and contexts, which provided proof of concept beyond the domain of contracts. The first Legal Design Jam events<sup>21</sup> conducted in 2013 showed

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19 A proactive contract has been described as one ‘crafted for the parties, especially for the people in charge of its implementation in the field, not for a judge who is supposed to decide about the parties’ failures’ in Gerlinde Berger-Walliser, Robert C Bird and Helena Haapio, ‘Promoting Business Success through Contract Visualization’ (2011) 17 *Journal of Law, Business & Ethics* 55, 61. The authors note that most contracts are not crafted in this way. Instead, they ‘contain concepts and language that non-lawyers often find overly complicated, obscure, and unappealing. This is because most contracts seem to be written by lawyers for lawyers’ (ibid 56). Chris Simkins calls such contracts ‘lawyer-to-lawyer’ or ‘L2L contracts’ – contracts where ‘it’s lawyers that lead the process of writing, reading, negotiating and finalising the contract documents on both sides’ (Chris Simkins, ‘L2L Contracts: Thinking beyond B2C and B2B’ (*Improving Contracts. Blog*) <<https://improvingcontracts.com/l2l-contracts-thinking-beyond-b2c-and-b2b/>> accessed 5 September 2023).

20 Helena Haapio, *Next Generation Contracts: A Paradigm Shift* (Lexpert Ltd 2013); Stefania Passera, *Beyond the Wall of Contract Text: Visualizing Contracts to Foster Understanding and Collaboration within and across Organizations* (Aalto University 2017); Milva Finnegan, *User-Centered Design: A Key to Contract Simplification* (University of Vaasa 2021). For reported business benefits achieved, see, e.g., Paula Doyle and Stefania Passera, ‘Contract Design and Simplification – Is This Now a Must-do?’ (2021) 14(56) *International In-house Counsel Journal* 7243.

21 See <<http://legaldesignjam.com/jams/past-jams/>>. Stefania Passera developed the idea and coined the concept of Legal Design Jam as a by-product of her doctoral research. The first Legal Design Jam events were organised in 2013, first on the

that contracts, conventions, policies, licences and legal information need not be boring, complex and inaccessible, and that designing engaging legal communication is possible even with a limited, or no budget.

Contracts have a significant impact on better business and a better society, too. Better contracts can help businesses and supply chains operate more effectively and sustainably, and contribute to a better society by promoting responsible business and procurement practices. For example, contracts can be used for setting ESG (Environmental, Social, and Governance) goals and improving transparency and accountability in transactions and relationships. In recent years, the proactive contracting approach has broadened to also include the promotion of societal goals, aiming at achieving and maintaining environmental, social and economic well-being for present and future generations. Responsible and sustainable contracting has emerged as a topic of growing interest in research and practice.<sup>22</sup>

Recently, the EU has proposed a plethora of new legislation related to sustainability. These proposals are well-intentioned and aim to make the EU's ambitious sustainability goals a reality. At the same time, they will impose a heavy burden of new and increased reporting requirements on companies. They will also force companies to review their procurement and contracting practices throughout their value chains. We will explore how possibility-driven design and AI can work together to help investors make better investment decisions, help companies meet their new sustainability reporting requirements, and drive sustainable and responsi-

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CISG, the Convention on Contracts for the International Sale of Goods, as part of the Information Design Summer School on Syros, Greece, and then on the Wikimedia Trademark Policy at the d.school at Stanford University in Stanford, CA, and in San Francisco, CA, USA.

- 22 See, e.g., Gerlinde Berger-Walliser, Paul Shrivastava and Adam Sulkowski, 'Using Proactive Legal Strategies for Corporate Environmental Sustainability' (2016) 6 *Michigan Journal of Environmental and Administrative Law* 1; Adam Sulkowski and Ruth Jebe, 'Evolving ESG Reporting Governance, Regime Theory, and Proactive Law: Predictions and Strategies' (2022) 59 *American Business Law Journal* 449; Nevena Jevremovic, 'Enforcing Sustainability Clauses in Global Supply Chains with a Focus on Proactive and Relational Contract Theory: Case of SDG 12' (2022) 25 *ZEuS Zeitschrift für Europarechtliche Studien* 393; and Juho Saloranta and Anna Hurmerinta-Haanpää, 'Proactive Contract Theory in the Context of Corporate Sustainability Due Diligence' (2022) 6 *Journal of Strategic Contracting and Negotiation* 221.

ble contracting practices – all ultimately contributing to better business and a better society.

## ***2. Sustainability and the Need for Tools to Help Navigate the Legal Landscape***

### *2.1. Managing the Flood of New Legislation on Sustainability*

Sustainability is at the heart of the European Union. In particular, it is guided by the European Green Deal, which is a comprehensive and ambitious set of sustainability objectives for the Union. The most important goal is to become the world's first climate-neutral continent by 2050. Climate Law (EU) 2021/1119<sup>23</sup> makes this target legally binding on EU Institutions and Member States. In addition, there are a number of sub-goals, such as clean water, energy efficiency, and healthy food.<sup>24</sup> The Green Deal also implements the United Nations' 2030 Agenda and the UN Sustainable Development Goals.<sup>25</sup> These global goals include, among others, ending poverty and hunger, achieving gender equality, and taking urgent action to combat climate change.<sup>26</sup>

To translate sustainability goals into action, investors, citizens and other stakeholders need *information* on the sustainability efforts of companies and other actors. However, the Corporate Sustainability Reporting Directive (CSRD) EU 2022/2464<sup>27</sup> identifies a gap between users' information needs and the sustainability information provided by com-

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23 Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') [2021] OJ L243/1.

24 European Commission, 'The European Green Deal' (Communication) COM(2019) 640 final, 4, 6–15.

25 *ibid* 3.

26 United Nations, 'Transforming Our World: the 2030 Agenda for Sustainable Development' (Resolution adopted by the General Assembly on 25 September 2015, A/RES/70/1, 21 October 2015) 14.

27 Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (CSRD) [2022] OJ L322/15.

panies. This gap is expected to widen if no action is taken. This would have significant negative consequences, such as the inability of investors to take sustainability into account when making investment decisions, and potential systemic risks that could even threaten financial stability. Without adequate information and a common understanding of what is 'sustainable', it is difficult to hold companies and other actors accountable for their impacts on the environment, people and society. The lack of common measures and definitions will also make it difficult for companies to assess, manage and respond to their sustainability efforts.<sup>28</sup>

Legislation is an important tool for achieving sustainability goals. As a result, the EU has recently issued a wealth of new regulations, directives and legislative proposals related to sustainability. To name just a few, the EU Taxonomy Regulation (EU) 2020/852<sup>29</sup> provides a classification framework for sustainable activities. It provides a definition of 'environmentally sustainable' economic activities and new disclosure requirements. Standardised definitions and measures are intended to prevent 'greenwashing', the marketing of products as environmentally friendly, when they are not.<sup>30</sup> The CSRD also introduces new and much broader reporting requirements for companies. In addition, the Sustainable Finance Disclosure Regulation (SFDR)<sup>31</sup> imposes new disclosure requirements for financial market participants and financial advisors at both the company and product level.

The proposal for a Directive on Corporate Sustainability Due Diligence (CSDDD) recognises the role of companies' day-to-day activities in achieving sustainability goals. The proposed Directive covers large companies as well as listed companies.<sup>32</sup> It aims to ensure that companies

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28 *ibid* recital 14.

29 Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 [2020] OJ L198/13.

30 *ibid* recitals 11–12, 19, arts 1, 3, 5–8.

31 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector [2019] OJ L317/1.

32 European Commission, 'Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937' COM(2022) 71 final. For the relevance of the CSDDD proposal for sustainable and responsible contracting, see also Section 2.4.

identify and, where necessary, prevent, end or mitigate adverse impacts not only of their own and their subsidiaries' operations, but also of their business partners in their supply chains.

In addition to several more substance-related legislative proposals, such as proposals for a Nature Restoration Law<sup>33</sup> and a Regulation on Deforestation-Free Products<sup>34</sup>, the EU has also created benchmarks, standards, and labels to help identify sustainable products. As the standards and labels are based on the EU Taxonomy, they will increase integrity and trust in the sustainable financial market and make it easier for investors to find sustainable investments. For example, the proposed European Green Bond Regulation sets a standard for high-quality green bonds.<sup>35</sup> Benchmarks are also useful tools for investors, as they allow them to measure and track the performance of assets and set allocations accordingly.<sup>36</sup>

Despite the growing need for sustainability information, the results of a European Commission study have shown that this demand is not being met.<sup>37</sup> Sustainability information is not easily accessible and digitally usable by public authorities in their supervisory and regulatory role, or by investors, financial professionals, consumers and other audiences. While new disclosure requirements, such as the EU Taxonomy, SFDR and CSRD, will increase the transparency of sustainability information, they will also increase the need for information accessibility. With its proposal for the European Single Access Point (ESAP) Regulation, the European Commission aims to bring 'simplification and improved efficiency' to sustainability information, by streamlining disclosure channels. The ESAP will be a

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33 European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on nature restoration' COM(2022) 304 final.

34 European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on the making available on the Union market as well as export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010' COM(2021) 706 final.

35 European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on European green bonds' COM(2021) 391 final.

36 European Commission, 'Action Plan: Financing Sustainable Growth' (Communication) COM(2018) 97 final, 4, 7.

37 European Commission, 'Impact Assessment Report' SWD(2021) 344 final, 18, recital 12.

central platform that gathers public information, including sustainability information, in one place.<sup>38</sup>

## 2.2. *The Link between Better Business and Better Society*

While climate and nature issues typically dominate in sustainability discussions, it is important to note that sustainability also has social and economic components. The key elements of sustainability are often described by the acronym ESG, which stands for Environmental, Social, and Governance.<sup>39</sup> Economic sustainability is necessary in order to have the resources to invest in other aspects of sustainability, such as companies looking after their supply chains. Accordingly, better business and a better society are intrinsically linked.

Sustainability goals cannot be achieved without adequate financing. According to the Green Deal, the private sector is the key to financing the green transition.<sup>40</sup> The EU has given sustainable finance a central role in achieving its sustainability goals. There is a huge need for additional investment to meet the targets, and the Sustainable Finance Framework aims to help with this. The Framework consists of three building blocks: 1) a classification system, or ‘taxonomy’, of sustainable activities, 2) disclosures that provide investors with the necessary information on sustainability, and 3) tools, such as benchmarks and standards.<sup>41</sup> The goal of these is to prevent greenwashing. Because of the business value of sustainability, companies can gain undeserved advantages by making false sustainability claims.<sup>42</sup> This, in turn, can reduce the motivation of other companies to act sustainably. So false sustainability claims can actually lead to worse business and a worse society.

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38 European Commission, ‘Proposal for a Regulation of the European Parliament and of the Council establishing a European single access point providing centralised access to publicly available information of relevance to financial services, capital markets and sustainability’ (ESAP proposal) COM(2021) 723 final, 5, recital 2.

39 See, e.g., European Commission, ‘Strategy for Financing the Transition to a Sustainable Economy’ (Communication) COM(2021) 390 final, 7.

40 COM(2019) 640 final, 16–17.

41 COM(2021) 390 final, 1–2.

42 See, e.g., COM(2019) 640 final, 8.

Accurate information and standardised definitions are therefore at the heart of the EU's efforts to promote sustainability. However, transparency alone cannot solve all sustainability problems, and there are many new obligations related to more concrete actions, such as greenhouse gas reduction and energy efficiency. In the following Sections, we will explore how sustainability disclosures and reporting, as well as sustainable and responsible contracting, can promote sustainability. Easy access to reliable sustainability information can greatly facilitate sustainable investment decisions. Sustainability requirements can also be incorporated into commercial contracts.<sup>43</sup>

### *2.3. Sustainability Reporting and Investor Disclosures to Promote Sustainable Investment*

Investors need reliable sustainability information in order to make investment decisions that promote sustainability. Companies will also benefit from sustainability information because it can help them access financial capital and manage their own sustainability risks and opportunities. In addition, it can serve as a basis for better communication between companies and their stakeholders.<sup>44</sup> Most sustainability information is derived from companies' sustainability reporting and disclosures.

Despite the new EU legislation, sustainability reporting is not a new phenomenon. EU companies have been required to report on sustainability under the Non-Financial Reporting Directive 2014/95/EU.<sup>45</sup> However, the term 'non-financial' is confusing and imprecise, giving the impression that sustainability information has no financial relevance.<sup>46</sup> The CSRD makes sustainability reporting both broader and more standardised than before. It also aims to ensure the comparability of sustainability information and disclosure of all the relevant information. Machine-readability is an important objective as well, as it will facilitate the use of the future ESAP platform.

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43 See also Salo-Lahti, Ranta and Haapio (n 16).

44 CSRD (n 27) recital 12.

45 Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups [2014] OJ L330/1.

46 CSRD (n 27) recital 8.

The SFDR requires financial market participants and financial advisors to disclose specific sustainability information to end investors. Identifying clients' sustainability preferences is now part of the duties of investment advisors. This should make sustainability more visible in the advisory process and increase the demand for sustainable investment products. The new EU legislation also aims to help investors identify sustainable investments. Therefore, the term 'sustainable investment' is harmonised in the SFDR. According to Article 2, sustainable investments contribute to environmental objectives as measured, for example, through key resource efficiency indicators on energy use, waste generation and greenhouse gas emissions. Sustainable investments can also contribute to social objectives, such as reducing inequality or promoting social inclusion.

In financial market law, the typical way to protect retail investors is to impose information requirements on those who have superior knowledge – typically companies and financial firms, as is also the case with sustainability information. This approach implicitly assumes that people are fairly rational and will read and digest the information they receive. It also homogenises retail investors, lumping them together as one large group of investors who all benefit from the same type of information.

Financial literacy studies can provide some insight into the average person's ability to use investment disclosures. These studies have shown that people's financial literacy is generally low. According to the OECD's definition, financial literacy consists of three main components: knowledge, behaviour and attitudes – i.e., it encompasses the aspects from thinking to doing.<sup>47</sup> The OECD has also measured financial well-being – a state of being in which individuals have control over their day-to-day finances, are able to cope with financial shocks, are able to achieve their financial goals and have the freedom to make choices that enable them to enjoy

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47 OECD, 'OECD/INFE 2020 International Survey of Adult Financial Literacy' (2020) 3 <[www.oecd.org/financial/education/launchoftheoecdinfeGLOBALFINANCIALLITERACYSURVEYREPORT.HTM](http://www.oecd.org/financial/education/launchoftheoecdinfeGLOBALFINANCIALLITERACYSURVEYREPORT.HTM)> accessed 1 March 2023. See also Tiina Koskelainen, Panu Kalmi, Eusebio Scornavacca and Tero Vartiainen, 'Financial Literacy in the Digital Age – A Research Agenda' (2023) *The Journal of Consumer Affairs* 1, 3 <<https://doi.org/10.1111/joca.12510>> accessed 1 March 2023. Koskelainen and others note that, contrary to the OECD definition, behaviour is typically an outcome variable influenced by financial literacy rather than a component of literacy.

life.<sup>48</sup> The OECD found that financial well-being also scored low (below 50 % of the maximum), meaning that financial situation does not contribute positively to well-being, but rather causes stress and worry. There are also especially vulnerable investor groups that have been shown to have more difficulty with financial literacy and financial well-being. For example, young people (aged 18–29) scored lower on financial literacy. They had lower levels of financial knowledge and less prudent financial behaviour. At the other end of the spectrum, seniors (age 60 and over) also had lower financial literacy and financial well-being scores.<sup>49</sup>

High levels of financial literacy are associated with better economic outcomes and help people make day-to-day financial decisions as well as in long-term financial activities.<sup>50</sup> The perspectives of financial literacy and financial well-being are consistent with the goals of legal literacy, legal well-being, and legal design. They take into account the ‘thinking to doing’ approach and differences among individuals, and they focus on well-being rather than problems. However, these goals and perspectives have not yet materialised in investor disclosures and company reporting. Loughran and McDonald noted that investors do not read company annual reports. In fact, usually, they do not even open them.<sup>51</sup>

The core problem may be that reports and disclosures are typically written in a way that does not encourage or entice us to read them. The European Commission found in its study that the current investor disclosure framework is limited in what it can achieve, as current disclosures are not ‘engaging’.<sup>52</sup> According to the Commission, engagement

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48 Consumer Financial Protection Bureau, ‘Financial Well-Being: The Goal of Financial Education’ (January 2015) 5.

49 OECD (n 47) 9.

50 Koskelainen and others (n 47) 1–2.

51 Tim Loughran and Bill McDonald, ‘The Use of EDGAR Filings by Investors’ (2017) 18(2) *Journal of Behavioral Finance* 231, 231–232. Loughran and McDonald studied the 10-K filings of US companies, and how often they were accessed from the EDGAR (Electronic Data Gathering and Retrieval) filings. Although the EDGAR server log cannot capture all the possible views and downloads of the reports, it is virtually the primary source of this type of information. EDGAR is administered by the US Securities and Exchange Commission (SEC).

52 European Commission, Directorate-General for Financial Stability, Financial Services and Capital Markets Union, Daniela Uličná, Máté Vincze, Marius Mosoreanu, Maxime Hayet, Raphaël de Landsheer, Osmo Järvi, Véronique Bruggeman, Julija

is a precondition for reading and understanding disclosures, and making decisions based on them. While attention is paid to the availability and accessibility of information, the current framework does not help to make the documents engaging enough to capture the attention of users. Although standardisation of terms and measures will help to improve understanding, it cannot overcome the difficulties arising from the complexity of the terminology used. The European Commission states that even when this complexity is presented in a standardised way, it still does ‘inhibit understanding’.<sup>53</sup> Later in this paper, we propose strategies and tools to solve this problem.

#### *2.4. Sustainable and Responsible Contracting*

The CSDDD proposal mentioned in Section 2.1 as an example of the flood of EU legislation on sustainability notes the critical role that contracts and procurement practices play in promoting sustainability throughout global value chains.<sup>54</sup> Its proposed Article 7 in its original form required companies to seek ‘contractual assurances’ from their direct business partners that they will comply with the company’s code of conduct and that such ‘assurances’ may also be sought from the business partners of business partners that are part of the company’s value chain.

It has been suggested that companies could fulfil many of their obligations under the originally proposed CSDDD by simply including clauses in their contracts requiring suppliers to follow their Code of Conduct. There has been wide criticism that this is going to lead to ‘tick-the-box compliance’ and that the required ‘contractual assurances’ would have allowed companies to pass on their responsibilities to their suppliers.<sup>55</sup>

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Sproge, Sarah Fialon, Willem Pieter De Groen, Cosmina Amariei, Inna Oliinyk and Jelmer Nagtegaal, ‘Disclosure, Inducements, and Suitability Rules for Retail Investors Study. Final report’ (Publications Office of the European Union 2023) 14.

53 *ibid.*

54 Salo-Lahti, Ranta and Haapio (n 16) 203.

55 See, e.g., European Parliament Committee on Legal Affairs, ‘Draft Report on the proposal for a directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 (COM(2022)0071 – C9-0050/2022 – 2022/0051(COD))’ <[www.europarl.europa.eu/doceo/document/JURI-PR-738450\\_EN.pdf](http://www.europarl.europa.eu/doceo/document/JURI-PR-738450_EN.pdf)> accessed 13 February 2023; and

In December 2023, the Council and the European Parliament reached a provisional agreement on the CSDDD. The wording of Article 7 in this version of the CSDDD has changed somewhat, but it contains a similar obligation to seek and establish contractual assurances.<sup>56</sup>

The discussion around the CSDDD proposal has brought today's procurement practices and contracts to the fore and drawn attention to how contracts are currently used and how they could be used in the future. Contracts have been seen in a new light, and growing attention has been paid by scholars and practitioners to the various purposes and functions of contracts. A similar discussion had already started, particularly among the promoters of proactive legal thinking, before sustainable and responsible contracting became a thing.<sup>57</sup>

Despite all the potential benefits that contracts can offer, research and practice tell us that contracts do not always work for the purposes they are expected to serve. The contract law duty to read contracts is not realistic. In commercial practice, contracts are not necessarily read – and

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Susan Maslow, 'No Safe Harbor in the "Contract Assurances" Required in the EU Directive Proposal' (*AMM Blog*, 28 March 2022) <[www.ammlaw.com/blog/no-safe-harbor-in-the-contract-assurances-required-in-the-eu-directive-proposal.html](http://www.ammlaw.com/blog/no-safe-harbor-in-the-contract-assurances-required-in-the-eu-directive-proposal.html)> accessed 13 February 2023.

56 Council of the EU, 'Corporate sustainability due diligence: Council and Parliament strike deal to protect environment and human rights' <[www.consilium.europa.eu/en/press/press-releases/2023/12/14/corporate-sustainability-due-diligence-council-and-parliament-strike-deal-to-protect-environment-and-human-rights/](http://www.consilium.europa.eu/en/press/press-releases/2023/12/14/corporate-sustainability-due-diligence-council-and-parliament-strike-deal-to-protect-environment-and-human-rights/)> accessed 31 January 2024. See also Part 2 in Richard Gardiner, 'Only One Item on the Agenda for Today's Meeting of the Council of the European Union #CompanyLaw Working Party' [2024] LinkedIn <[www.linkedin.com/feed/update/urn:li:activity:7157652239174483968/](https://www.linkedin.com/feed/update/urn:li:activity:7157652239174483968/)> accessed 31 January 2024.

57 See, e.g., Berger-Walliser, Shrivastava and Sulkowski (n 22). See also Anna Hurmerinta-Haanpää, *The Many Functions of Contracts: How Companies Use Contracts in Interorganizational Exchange Relations* (Doctoral Dissertation, University of Turku 2021); IACCM, *The Purpose of a Contract: An IACCM Research Report* (2017) <[www.worldcc.com/Portals/IACCM/resources/files/9876\\_j18069-iaccm-purpose-of-contract-a4-2017-11-14-v1-webready.pdf](http://www.worldcc.com/Portals/IACCM/resources/files/9876_j18069-iaccm-purpose-of-contract-a4-2017-11-14-v1-webready.pdf)> accessed 13 February 2023; and Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar 2022), where Parts II and III include several chapters dedicated to 'Why contract design matters: rethinking the business and legal purpose and functions of contracts' and 'Designing better contracts for business and legal purposes'.

are even less likely to be understood by people who lack legal training.<sup>58</sup> This problem has been known for quite some time, especially in the context of consumer contracts: they are not engaging, and readers give up before starting to read. The problems and their causes are well known and widely researched.<sup>59</sup> Yet they persist in practice. The world of contracts – or contract research – does not change quickly. Apart from the proponents of proactive legal thinking and design, there has been much more academic work on the problems than on the solutions.

Contracts can be a powerful tool to promote, measure and monitor sustainability in supply chains. But if contracts remain unread, they fail to achieve this goal. This is where design comes in. The fields of legal design and contract design help legal and business professionals improve communications, services and solutions by applying design mindsets, tools and methods.

### **3. Strategies and Tools to Promote Sustainability**

#### *3.1. Possibility-Driven Design Solutions*

According to the European Commission, disclosure is ‘a necessary but insufficient means to support retail investors in making their choice’, for reasons that were explained in Section 2.3.<sup>60</sup> Possibility-driven design can make a significant contribution to overcoming these challenges. It is

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58 Mattias Rättzén, ‘Automated Contract Review: Challenges and Outcomes of a Data Annotation Framework’ (2022) 62 *Jurimetrics Journal* 225, 236. See also Berger-Walliser and others (n 19) 56: ‘too many contracts that are much too long require more reading time than most managers can afford.... So business people may enter into contracts every day without examining them.’ See also Simkins (n 19).

59 See, e.g., Uri Benoliel and Shmuel I Becher, ‘The Duty to Read the Unreadable’ (2019) 60 *Boston College Law Review* 2255; Wendy Wagner and Will Walker, *Incomprehensible!: A Study of How Our Legal System Encourages Incomprehensibility, Why It Matters, and What We Can Do About It* (CUP 2019); and Wendy E Wagner, ‘Rethinking Legal Requirements: A Case Study of Incomprehensible Consumer Contracts in the United States’ in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar 2022).

60 European Commission, Directorate-General for Financial Stability, Financial Services and Capital Markets Union and others (n 52) 14.

not enough for users of sustainability information to pay more attention to sustainability – sustainability needs to be moved from thinking to doing, taking action, in order to advance the goals of the Green Deal.

In this Section, we introduce some of the more prominent tools and give examples of how they can be used. First, we will discuss design patterns, which provide solutions for communicating complex information more clearly and in a way that is more likely to be read, understood and acted upon.<sup>61</sup> Templates and models can also facilitate the task of communicating effectively. In addition, responsible use of AI can help address the challenges of sustainability communication and contracting. For example, it can help draft summaries and explanations and present key information in a more engaging way. It can also make it easier to find information in large amounts of data. So, AI can help both readers and writers of contracts, sustainability reports and disclosures. However, the limitations and risks related to AI tools must also be taken into account, and they will be discussed later.

One of the problems with investor disclosures identified in the European Commission study mentioned above is that there is typically little focus on the environment and context in which the disclosure is used. Taking these into account would encourage investors to use and act on the information.<sup>62</sup> Possibility-driven design and AI tools can help contextualise and personalise sustainability information, for example, by changing its mass formatting or tone of voice to a personalised version, adjusting to the knowledge level of an individual and adapting the content and presentation accordingly.<sup>63</sup>

As one of the aims of this paper is to move from vision to action – from (design) thinking to doing – in order to genuinely promote sustainability, we argue for the need to move from merely drafting communications to designing communications and to consider the needs of different user groups. This is also a prerequisite for better legal literacy and self-care.

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61 For contracts, see WorldCC Foundation, Stefania Passera and Helena Haapio, 'Contract Design Pattern Library' <<https://contract-design.worldcc.com/>> accessed 31 January 2023.

62 European Commission Directorate-General for Financial Stability, Financial Services and Capital Markets Union and others (n 52) 14.

63 See also Haapio, Barton and Corrales Compagnucci (n 6) 72.

In summary, we argue that design solutions have the potential to close the ‘engagement’ gap identified in the context of contracts and other complex information, such as disclosures. Legal design is based on the vision of a legal system that is more straightforward, more engaging, and more user-friendly, including the way information is presented.<sup>64</sup> Together with AI, possibility-driven legal design can help to overcome the communication challenges of sustainability information and serve as a foundation for sustainable action.

### 3.2. Design Patterns

Design patterns and pattern libraries have been used in various fields, including architecture, software engineering and UX design, as a way to share design knowledge. Design patterns can be defined as reusable models of a solution to frequently occurring problems in a domain. They also exist in the domains of legal design and contract design.<sup>65</sup> The use of patterns can help communicate design concepts and provide effective solutions to design problems.

In the context of contracts, the WorldCC Contract Design Pattern Library<sup>66</sup> provides design principles and real-world examples of how the patterns have been implemented. A design pattern is not a ready-made

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64 *ibid.*

65 For examples and references, see, e.g., Helena Haapio and Margaret Hagan, ‘Design Patterns for Contracts’ in Erich Schweighofer, Franz Kummer, Walter Hötzen-dorfer and Georg Borges (eds), *Networks. Proceedings of the 19th International Legal Informatics Symposium IRIS 2016* (Österreichische Computer Gesellschaft OCG/books@ocg.at 2016); Rossi and others (n 14) 79; Helena Haapio and Stefania Passera, ‘Contracts as Interfaces: Visual Representation Patterns in Contract Design’ in Daniel M Katz, Ron Dolin and Michael J Bommarito (eds), *Legal Informatics* (CUP 2021); Arianna Rossi and Helena Haapio, ‘Proactive Legal Design: Embedding Values in the Design of Legal Artefacts’ in Erich Schweighofer, Franz Kummer and Ahti Saarenpää (eds), *Internet of Things. Proceedings of the 22nd International Legal Informatics Symposium IRIS 2019* (Editions Weblaw 2019). Examples of Legal Communication Design Pattern Libraries can be found at <<https://legaltechdesign.com/communication-design/legal-design-pattern-libraries/>>, which includes a Know Your Rights Design Pattern Library, Contract Design Pattern Library and Privacy Design Pattern Library.

66 WorldCC Foundation, Passera and Haapio (n 61).

template or a finished design, but rather a model approach that provides guidance and examples for identifying a problem and developing a solution. The design pattern should not be strictly followed – instead, it should be adapted to meet the needs of the designer, the context and the audience.

Let's take an example: different readers and contexts can be accommodated with layering, which can be used both online and offline. With layering, the same information is presented in different ways, depending on the needs and capabilities of the audience. Creative Commons Licences are an early example of layering. Their three-layer design consists of the Legal Code layer – the typical 'lawyer-readable' version of the text; the Commons Deed – the 'human readable' version of the licence; and finally, the 'machine readable' version, which allows search engines and other technologies to 'understand' and interact with the licence terms.<sup>67</sup> With layering, it is possible to help readers avoid information overload: key information is quickly and easily findable, while details are available 'on demand' for those who want or need them. Layering is a good practice to support strategic reading.<sup>68</sup> A layered layout with multiple headings can help make the content easier to understand by breaking it down into smaller, more digestible sections. In this way, layering can promote transparency and facilitate acting upon information.

Adding explanations or summaries is particularly promising in our context. However, not everyone is enthusiastic about them. In a 2018 study, Uri Benoliel and Samuel Becher examined 500 widely-used websites' sign-in-wrap agreements and found that 22 included explanations or clarifications of the agreement or some of its terms, and 19 provided a summary just before the full contract terms. While such approaches may make the terms less tedious to read and arguably more memorable,

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67 Creative Commons, 'About the Licences' <<https://creativecommons.org/licenses/?lang=en>> accessed 31 January 2023.

68 For contracts, see WorldCC Foundation, Stefania Passera and Helena Haapio, 'Layering' (*Contract Design Pattern Library*) <<https://contract-design.worldcc.com/library/layering>> accessed 1 March 2023. The Library currently contains ten different 'pattern families' that each have several patterns. There are currently eight different patterns in the layering 'pattern family', namely accordion, clause summaries, exemplar, guidance notes, skimmable headings, swim lanes, term sheet and user guide format, all with examples from real-world contracts. WorldCC Foundation, Passera and Haapio (n 61).

they raise several concerns, according to the authors. First, readers may be unsure about what they are supposed to read: the formal terms, the annotations, or both, and what parts of the text are legally binding. In the event of a legal dispute, should courts favour one type of text over another? Moreover, the authors ask, might such a text cause consumers to become less vigilant and not fully aware of the legal risks and obligations of the contract?

While the concerns raised by Benoliel and Becher are valid in the context of consumer contracts, they may not carry the same weight in the context of this paper: B2B contracts, where parties typically have more experience with and understanding of contracts.<sup>69</sup> In addition, the Benoliel and Becher article discusses a specific and narrow (though common) category of consumer standard form contracts: sign-in-wrap contracts, where consumers are asked to agree to the terms and conditions of a website. Web wrap contracts and complex B2B contracts serve fundamentally different purposes and audiences. The latter type of contracts often include hundreds if not thousands of obligations and detailed business and financial terms that not only need to be understood by the parties but also adhered to and potentially passed along the supply chain.

Some organisations and lawyers may wish their contracts and terms to remain unread – proactive lawyers think and act differently, using explanations to achieve greater transparency, efficiency and understanding, and adding clarifications, interpretation clauses and other contractual devices to reduce potential confusion about what to read and what parts of the text are legally binding.<sup>70</sup> On the question of how courts

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69 Still they may be reluctant to read contracts. See Section 2.4, with references.

70 For interpretation clauses, see Chapter 3 in Marcel Fontaine and Filip de Ly, *Drafting International Contracts: An Analysis of Contract Clauses* (Brill 2009). One possible solution is to design contracts where all of their component parts are intended to be equally valid and part of the legally binding contract. For Composite Comic Contracts, which consist of images, text and a voice-over, see Anne Ketola, Robert de Rooy and Helena Haapio, 'Comic Contracts 2.0 – Contracts that Have (and Give) a Voice' in this volume. For suggestions related to the interpretation of images in contracts, see also Vesa Annola, Helena Haapio and Merja Koskela, 'Interpreting Images in Contracts' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar 2022); Helena Haapio, Vesa Annola and Merja Koskela, 'Ten Ways to Make the Interpretation of Images More Predictable' *Contracting Excellence Journal* (5 November 2020)

should interpret the different types of text, it is important to note that in most jurisdictions the interpretation of contracts involves looking at the intention of the parties. Clear explanations can help demonstrate the intention behind certain provisions, particularly in cases where traditional legal language may be ambiguous.

### *3.3. Templates and Models*

Contract drafting rarely starts with a blank sheet of paper. Rather, it begins with a template, form or model, or with a clause library. In today's contract practice, clauses and Codes of Conduct that address sustainability issues are frequently used. Where companies choose not to negotiate such clauses individually with each supplier, the clauses can be made part of standard terms and conditions. These tend to favour the buyer, due to the fact that there is often a major imbalance in the bargaining power between the buying companies and their suppliers. A new approach has been taken in the Model Contract Clauses known as ABA MCCs 2.0<sup>71</sup> produced by a Working Group of the Business Law Section of the American Bar Association. The same Working Group has also produced a model Buyer Code of Conduct called the 'Responsible Purchasing Code of Conduct'.<sup>72</sup> Based on these models, the leading members of the Working Group established the Responsible Contracting Project (RCP) in 2022, with the mission to improve human rights in global supply chains through innovative contracting practices. Following its mission, the RCP develops and disseminates 'practical contractual tools to support more cooperative relations between supply chain firms and better

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[www.worldcc.com/Resources/Content-Hub/View/ArticleID/10897](http://www.worldcc.com/Resources/Content-Hub/View/ArticleID/10897)> accessed 13 February 2023.

71 American Bar Association, 'Contractual Clauses Project' <[www.americanbar.org/groups/human\\_rights/business-human-rights-initiative/contractual-clauses-project/](http://www.americanbar.org/groups/human_rights/business-human-rights-initiative/contractual-clauses-project/)> accessed 13 February 2023. See also David Snyder, Susan Maslow and Sarah Dadush, 'Balancing Buyer and Supplier Responsibilities: Model Contract Clauses to Protect Workers in International Supply Chains, Version 2.0' (2021) 77 *The Business Lawyer* 115.

72 Working Group of the American Bar Association (ABA) Business Law Section, 'Responsible Purchasing Code of Conduct: Schedule Q Version 1.0' <[www.americanbar.org/content/dam/aba/administrative/human\\_rights/contractual-clauses-project/scheduleq.pdf](http://www.americanbar.org/content/dam/aba/administrative/human_rights/contractual-clauses-project/scheduleq.pdf)> accessed 13 February 2023.

human rights outcomes for workers'.<sup>73</sup> It has developed a toolkit, 'the Responsible Contracting Toolkit', seeking to operationalise and implement the Responsible Contracting Principles, which challenge the shortcomings of traditional contracting, such as supplier-only responsibility.<sup>74</sup>

Templates, guidance and model clauses are expected to be provided by the EU as well. In order to improve the comparability of sustainability disclosures, the European Commission has already formulated standardised disclosure templates in its Delegated Regulation (EU) 2022/1288<sup>75</sup>, which specifies the SFDR. Articles 12 and 13 of the CSDDD state that the Commission will provide guidance for model contract clauses and may also issue guidelines for specific sectors or specific adverse impacts.

A European working group has recently published a draft of European Model Clauses (EMCs) for supply chains and has sought input on these clauses. Building on the ABA MCCs 2.0, their goal is to adapt the clauses to the European context and ensure that they comply with EU law and national contract law systems.<sup>76</sup> Adaptations may be required for some countries, but the European working group intends to develop general EMCs in order to accommodate the desire of many companies to use the

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73 Responsible Contracting Project, 'The Mission' <<https://responsiblecontracting.org>> accessed 27 June 2023.

74 Responsible Contracting Project, 'The Toolkit' <<https://www.responsiblecontracting.org/toolkit>> accessed 6 November 2023. In addition to the MCCs 2.0 and the Responsible Purchasing Code of Conduct (the Buyer Code), the Toolkit also includes the recently published Supplier Model Contract Clauses (SMCs 1.0) for the apparel and textile sector.

75 Commission Delegated Regulation (EU) 2022/1288 of 6 April 2022 supplementing Regulation (EU) 2019/2088 of the European Parliament and of the Council with regard to regulatory technical standards specifying the details of the content and presentation of the information in relation to the principle of 'do no significant harm', specifying the content, methodologies and presentation of information in relation to sustainability indicators and adverse sustainability impacts, and the content and presentation of the information in relation to the promotion of environmental or social characteristics and sustainable investment objectives in pre-contractual documents, on websites and in periodic reports [2022] OJ L196/1.

76 Daniel Schönfelder, Bettina Braun and Martijn Scheltema, 'Contracting for Human Rights: Experiences from the US ABA MCC 2.0 and the European EMC Projects' (*Nova Centre on Business, Human Rights and the Environment Blog*, 1 November 2022) <<https://novabhre.novalaw.unl.pt/contracting-for-human-rights-experiences-from-the-us-aba-mcc-2-0-and-the-european-emc-projects>> accessed 13 February 2023.

same clauses across Europe: the EMCs are expected to indicate where specific legal systems require specific adaptations.<sup>77</sup>

Other initiatives in the area of model contract clauses include the Chancery Lane Project<sup>78</sup> for climate-aligned clauses and the Sustainable Terms of Trade Initiative (STTI)<sup>79</sup>, a manufacturer-driven initiative focused on creating fairer purchasing practices in the textile and garment industry. Further initiatives are underway. However, many of these model clauses tend to be written by lawyers for other lawyers<sup>80</sup> and would benefit from a more user-centric design.

Reading, writing and (re)designing these templates and models is not an easy task. Next, we will look at how AI tools such as GPT-4 or ChatGPT could help, and how we could implement these tools responsibly.

### *3.4. Responsible Use of AI tools for Sustainability*

#### *3.4.1. Managing the Challenges of Generative AI*

In its Sustainable Finance Strategy, the European Commission states that digital technologies can provide ‘essential solutions for citizens, investors and SMEs to carry out their transition to sustainability’. The Commission encourages the use of innovative solutions to support retail investors’ understanding of the sustainability of investment products. Therefore, technological innovation, including AI, has an important role to play in sustainable finance.<sup>81</sup> Similarly, the Commission’s White Paper on Artificial Intelligence states that digital technologies, such as AI, are critical enablers for achieving the goals of the Green Deal. At the same time, AI poses risks, such as opaque decision making and different types of discrimination.<sup>82</sup> New innovations will also put more pressure on people’s

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<sup>77</sup> *ibid.*

<sup>78</sup> Chancery Lane Project, <[www.chancerylaneproject.org/](http://www.chancerylaneproject.org/)> accessed 29 June 2023.

<sup>79</sup> Sustainable Terms of Trade Initiative, <[www.sustainabletermsoftradeinitiative.com/](http://www.sustainabletermsoftradeinitiative.com/)> accessed 29 June 2023.

<sup>80</sup> See Berger-Walliser and others (n 19) and Simkins (n 19).

<sup>81</sup> COM(2021) 390 final, 8. See also Koskelainen and others (n 47) 2. The authors note that digital tools present both opportunities and challenges, and that today’s digitised financial landscape is more complex than it was in the ‘analogue’ world.

<sup>82</sup> European Commission, ‘White Paper on Artificial Intelligence – A European Approach to Excellence and Trust’ COM(2020) 65 final, 1–2, 19.

digital financial literacy. Investors and other users will need some technical knowledge and skills to understand and use new technologies.<sup>83</sup>

ChatGPT and GPT-4 are part of generative AI, which is a subset of AI that generates content such as text, images, audio, or video, resembling closely human-created content.<sup>84</sup> Applications based on generative AI are already widely used. For instance, ChatGPT became the fastest growing digital service ever, reaching 100 million users two months after launching.<sup>85</sup> AI-based applications affect people everywhere, from social media postings to the decisions about who will receive state benefits. If AI contains biases, it might have negative consequences even for our fundamental rights, if significant decisions are made based on algorithms that are biased against certain groups of people.<sup>86</sup>

Despite its great popularity and potential, generative AI has its risks and challenges. In addition to potential biases, the Norwegian Consumer Council divides the harms and challenges of generative AI into several categories: structural challenges; manipulation; discrimination, and content moderation; privacy and data protection; security vulnerabilities and fraud; replacing humans in consumer-facing applications with generative AI; environmental impacts; labour impacts; and intellectual property challenges.<sup>87</sup>

Intellectual property challenges relate both to image-generating tools and large language models (LLMs). According to *Strowel*, there are already at least five cases, mostly class actions, filed in the US and UK against generative AI. These cases mainly involve tools for creating graphic material.<sup>88</sup> In LLMs, training data can include copyrighted materials. Some models are transparent regarding their training data sources,

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83 Koskelainen and others (n 47) 2, 4.

84 Norwegian Consumer Council, 'Ghost in the Machine – Addressing the Consumer Harms of Generative AI' (2023) 7.

85 Dan Milmo, 'ChatGPT Reaches 100 Million Users Two Months After Launch' *The Guardian* (2 February 2023) <[www.theguardian.com/technology/2023/feb/02/chatgpt-100-million-users-open-ai-fastest-growing-app](http://www.theguardian.com/technology/2023/feb/02/chatgpt-100-million-users-open-ai-fastest-growing-app)> accessed 26 June 2023.

86 European Union Agency for Fundamental Rights, 'Bias in Algorithms – Artificial Intelligence and Discrimination' (2022) 7.

87 Norwegian Consumer Council (n 84) 14–39.

88 Alain Strowel, 'ChatGPT and Generative AI Tools: Theft of Intellectual Labor?' (2023) 54 IIC – International Review of Intellectual Property and Competition Law 491, 492.

while others do not provide source information. Now, some solutions to this problem have been developed, such as the Kelvin Legal DataPack, which obtains data only from sources with clear intellectual property rights that explicitly allow the reuse of data for commercial purposes.<sup>89</sup> Microsoft, which is currently integrating its Copilot AI assistant into many of its software offerings, has announced that it has content filters and other technology in place to reduce the likelihood of copyright infringement, and has promised to defend its Copilot enterprise customers against copyright lawsuits.<sup>90</sup>

In addition to intellectual property rights, the risks associated with the practical use of GPT models include hallucinations and errors, inconsistent responses, lack of metacognition and statistical understanding, and lack of verifiability and reasoning.<sup>91</sup> Data privacy and the protection of minors have also been important concerns.<sup>92</sup> Age verification tools would prevent underage users from accessing generative AI models. In regard to privacy concerns, for example, Microsoft Azure<sup>93</sup> and ChatGPT Enterprise<sup>94</sup> promise to provide data privacy for their AI tools.

The widely cited challenges have not deterred us from exploring generative AI tools and encouraging others to do so. For us, the challenges

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89 Jillian Bommarito, 'Why We Built the Kelvin Legal DataPack' (*Kelvin Legal Data OS*, 21 August 2023), <<https://kelvin.legal/why-kelvin-legal-datapack/>> accessed 30 August 2023.

90 'We are charging our commercial customers for our Copilots, and if their use creates legal issues, we should make this our problem rather than our customers' problem.' Brad Smith and Hossein Nowbar, 'Microsoft Announces New Copilot Copyright Commitment for Customers' (*Microsoft Blog*, 7 September 2023) <<https://blogs.microsoft.com/on-the-issues/2023/09/07/copilot-copyright-commitment-ai-legal-concerns/>> accessed 10 September 2023.

91 Srimi Pagidyal, 'WARNING: This Paper Contains Model Outputs...' [2023] LinkedIn <[www.linkedin.com/feed/update/urn:li:activity:7077400934682685447/](https://www.linkedin.com/feed/update/urn:li:activity:7077400934682685447/)> accessed 27 June 2023.

92 See, e.g., Garante Per La Protezione Dei Dati Personali, Provvedimento dell'11 aprile 2023 [9874702] <[www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9874702#english](http://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9874702#english)> accessed 30 August 2023.

93 Microsoft, 'Azure Customer Data Protection' (31 December 2022) <<https://learn.microsoft.com/en-us/azure/security/fundamentals/protection-customer-data>> accessed 30 August 2023.

94 OpenAI, 'Introducing ChatGPT Enterprise' <<https://openai.com/blog/introducing-chatgpt-enterprise>> accessed 8 September 2023.

mean that we need to be aware of the potential risks and challenges and act accordingly, primarily by having a knowledgeable human expert review and editing the output before it is accepted, distributed, and acted upon.<sup>95</sup> We have used generative AI under the close control and supervision of a human. The role of humans as users of AI tools and as reviewers and editors of input (prompts) and output is critical, and typically not well recognised when discussing the use of AI tools. In prompts, users can significantly guide the output, for example by asking for references and indicating what type of output is preferred and what is not. Rather than automating decision making or producing final versions, we have successfully used AI to suggest topics, headings and ideas, and to provide initial drafts. Used in this way, we have found that generative AI can greatly increase efficiency, while human oversight helps to address challenges such as bias and error.

Regulation is also an important response to the challenges of AI. Legislation on generative AI is emerging, and some of the existing EU legislation may also be applicable, depending on the context. For example, the General Data Protection Regulation (GDPR)<sup>96</sup> applies to generative AI applications in relation to personal data, and the Unfair Commercial Practices Directive (UCPD)<sup>97</sup> may address misleading or aggressive commercial practices using generative AI. Among the emerging EU regulations, the proposed AI Act is also important from a generative AI perspective.<sup>98</sup> The Parliament's position on the AI Act, which was adopted in June 2023, includes so-called foundation models in the proposal. Providers of foundation models, including GPT, would be required to ensure the protection of fundamental rights, health and safety and the environ-

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95 See also Pagidyala (n 91).

96 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L119/1.

97 Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council [2005] OJ L149/22.

98 Norwegian Consumer Council (n 84) 42–44.

ment, democracy and the rule of law. Providers would also have to adequately assess and mitigate risks, comply with design, information and environmental requirements and register with the EU database. There are specific obligations for providers of foundation models of generative AI. These specific obligations relate to transparency, training, design and development of the model so that it does not generate illegal content. A sufficiently detailed summary of the use of copyrighted training data must also be published.<sup>99</sup> In this way, once applied, the AI Act can make AI tools more accurate and safer. However, the role of users in terms of the input and output will remain critical.

### 3.4.2. Examples of Using Generative AI Tools

AI, including machine learning, enables the processing of legal information, disclosures and contracts as data. While it can analyse massive amounts of data, it can also provide valuable information about what is typical, 'standard' or 'average' in a given set of circumstances. For example, there are AI tools designed to assist in the analysis of contracts and identify terms that deviate from what is considered customary or desirable in a particular industry or jurisdiction. Contract analysis and review tools can scan contracts and flag unusual or undesirable clauses for review. Such AI tools have been commercially available for several years, while generative AI tools are of more recent origin.<sup>100</sup> Whether the work is done by humans or AI, the contracting parties will benefit, when contract terms and disclosures are better read and understood. From a preventive standpoint, this can lead to a reduction in misunderstandings, disputes and litigation.<sup>101</sup> From a promotive perspective, it can also lead to more sustainable investments, better contracts and better business – all of which contribute to a better society.

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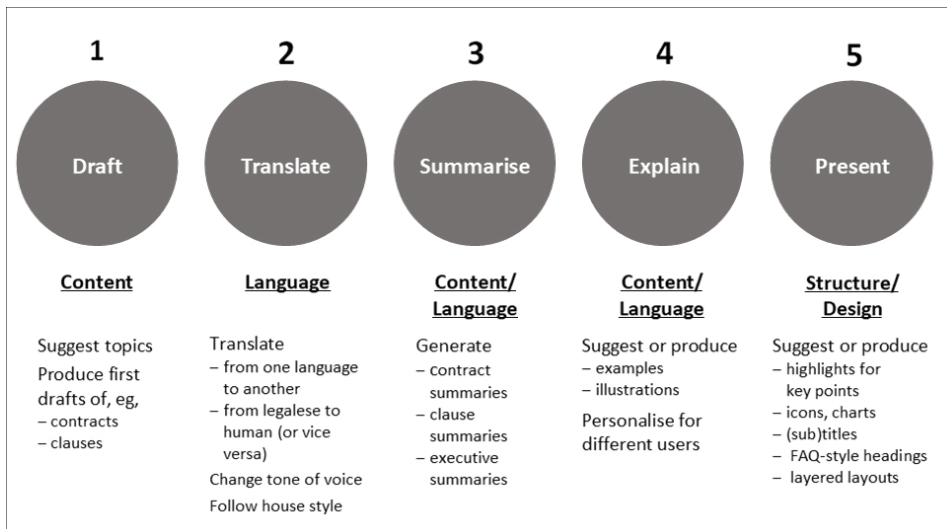
99 European Parliament, 'Draft Compromise Amendments on the Draft Report Proposal for a regulation of the European Parliament and of the Council on harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9 0146/2021 – 2021/0106(COD))' recital 60g, art 28b.

100 See, e.g., Russ Edelman, 'The Practicalities of AI and Contract Management' *Contracting Excellence Journal* (6 June 2023) <[www.worldcc.com/Resources/Blogs-and-Journals/Contracting-Excellence-Journal/View/ArticleId/11552/The-Practicalities-of-AI-and-Contract-Management](http://www.worldcc.com/Resources/Blogs-and-Journals/Contracting-Excellence-Journal/View/ArticleId/11552/The-Practicalities-of-AI-and-Contract-Management)> accessed 11 September 2023.

101 Rättzén (n 58) 227, 235–37.

Recently, there has been a significant shift in AI's ability to process text. Arbel and Becher explored the capabilities of GPT-3 models to act as 'smart readers' of contracts, disclosures, and privacy policies. They identified four core capabilities of smart readers: they can simplify and summarise complex legal text; personalise the text based on the characteristics of the reader; interpret contract terms; and benchmark and rank contracts based on their quality.<sup>102</sup>

We have been testing OpenAI's GPT models in the field, particularly in the context of contracts and sustainability reporting. Figure 1 shows the potential we have found that generative AI such as Open AI's ChatGPT already has in the context of contract planning and design. In addition to providing translations from one language to another, it seems to be able to provide overviews and suggestions based on available information and help us to draft, summarise, explain and present contracts and contract clauses.



*Fig. 1. AI-powered contract planning and design: what generative AI can already do. © 2023 Helena Haapio. Licensed under CC BY-NC 4.0*

<sup>102</sup>Yonathan A Arbel and Shmuel I Becher, 'Contracts in the Age of Smart Readers' (2022) 90 *George Washington Law Review* 83, 83, 89.

In the following, we present examples of our testing of OpenAI's GPT-4's ability to help us navigate sustainability legislation, suggest contract topics and ideas, and present initial drafts of contract content and presentation.

The European Union has recently finalized the Corporate Sustainability Reporting Directive (CSRD) that will introduce more detailed sustainability reporting requirements for companies operating within the EU, as well as non-EU companies that meet certain criteria related to their net turnover in the EU and companies with securities listed on a regulated EU market. The CSRD came into force on January 5, 2023, and the rules will be gradually implemented starting from January 1, 2024, for certain large EU and EU-listed companies, with the aim of applying to all in-scope companies by January 1, 2028.

The CSRD is part of a larger legislative package aimed at promoting corporate sustainability and a green economy, with other major European initiatives including the EU Taxonomy Regulation and the EU Sustainable Finance Disclosure Regulation. Further progress is expected in 2023 regarding related legislative and regulatory initiatives, including the Directive on Corporate Sustainability Due Diligence and the EU Green Bond Standard.

Under the CSRD, companies must disclose how sustainability-related factors, such as climate change, affect their operations and how their business model impacts sustainability factors. The scope of required reporting covers environmental, social and human rights, and governance factors. Specifically, environmental factors include climate (including Scopes 1, 2 and 3 greenhouse gas emissions), water/marine resources, circular economy, pollution, and biodiversity. Companies are also required to disclose their plans to ensure that their business models and strategies are compatible with the goal of limiting global warming to 1.5 °C in line with the Paris Agreement and the EU's own European Climate Law, which aims to achieve climate neutrality by 2050.

Regarding supplier contracts, the CSRD requires companies to disclose information about their value chain, including their own operations, products and services, business relationships, and supply chain where applicable. Companies are also required to disclose the due diligence processes they have implemented concerning sustainability matters, including any actions they have taken to prevent or mitigate any actual or potential adverse impacts related to their activities. However, I was unable to find more detailed information about the specific impact of these regulations on contracts with suppliers during this search.

In summary, the EU's new sustainability legislation imposes substantial new disclosure and compliance requirements on companies, which could influence their business relationships and contracts, including those with suppliers. However, more research would be needed to detail these impacts more specifically.

*Fig. 2. GPT-4 using Bing (Beta) summarising recent and forthcoming sustainability legislation and its impact on contracts with suppliers. Powered by OpenAI, used with ChatGPT Plus May 25, 2023 version. References omitted.  
Licensed under CC BY-NC 4.0.*

Figure 2 shows an extract from the results of GPT-4, using its built-in browser and Bing (Beta), when asked to summarise recent and forthcoming EU legislation and its impact on contracts with suppliers.<sup>103</sup> This simple example demonstrates how AI can be used as an ideation and reading tool: it can help simplify and summarise text and find the most relevant information.<sup>104</sup> This example also illustrates how at the time of this test, the GPT-3 knowledge cut-off date, September 2021, was not a limiting factor: more recent information could be found in the output. Here GPT-4 correctly stated that the CSRD came into force on January 5, 2023. It also discussed some of the legislative changes expected in 2023. The 'Finished browsing' button allowed the viewer to see what kind of references were 'clicked' during the process. The 'Browse with Bing' feature, previously removed, has now been reinstated, enhancing the verification process and addressing some of the prevalent concerns with generative AI. GPT-4 also 'acknowledges' its shortcomings, noting that 'more research would be needed to detail these impacts more specifically'.

In our next test, again using OpenAI's GPT-4 with Bing (Beta), we first asked GPT-4 to summarise EU reporting requirements related to companies' and their value chains' carbon footprint and then, after receiving the summary, we asked it to explain how it did this, including which website it visited.<sup>105</sup> After receiving a step-by-step description of its search process, we asked it to suggest what about these reporting requirements a company should include in its contracts with its suppliers

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103 We used the following prompt: 'I am writing an article about new EU sustainability legislation and how it impacts (and hopefully improves) investment decision-making and contracts. Can you help me by summarizing how the recent and forthcoming EU legislation impacts on contracts with suppliers, with references, please?' The full chat, with references, can be viewed at <<https://chat.openai.com/share/ba37afce-387d-4602-aea3-3f47a1a67f8e>>. ChatGPT named this chat of 21 June 2023 'EU Sustainability Impact on Contracts'.

104 For the opportunities and challenges of using GPT-3 as a reading tool in the context of contracts, see also Arbel and Becher (n 102).

105 For this purpose, we used the following prompt: 'Can you summarise EU reporting requirements related to companies' and their value chains' carbon footprint, please?' The full chat, including the response, can be viewed at <<https://chat.openai.com/share/3ef10bc8-2198-45e4-9527-dba91582b383>>.

and customers.<sup>106</sup> In the response, ChatGPT identified six key points to consider. These are shown in Figure 3.

As for what a company should include in its contracts with suppliers and customers, it's critical to include provisions that ensure compliance with the forthcoming requirements. Here are some points that could be considered:

**Compliance with Regulations:** Clauses should be included that require all parties to comply with applicable regulations, including the new sustainability reporting requirements. This includes any future amendments or additions to these requirements.

**Data Collection and Reporting:** Since the reporting requirements might need information from suppliers (such as Scope 3 emissions data), contracts should specify the obligations of suppliers to provide necessary data in a timely and accurate manner. The same applies to customers if their activities are relevant to the company's reporting requirements.

**Auditing and Verification:** To ensure the accuracy of the data provided by suppliers and used in reports, contracts may include the right to audit suppliers or require third-party verification of data.

**Liability for Non-compliance:** The contracts should clearly outline the consequences of non-compliance with the reporting requirements, including potential termination of the contract, financial penalties, or other remedial actions.

**Cooperation in Case of Regulatory Inquiry:** In case of any regulatory inquiries or investigations related to these reporting requirements, the contracts could include clauses requiring cooperation between the parties.

**Confidentiality and Data Protection:** Given that data sharing is involved, contracts should include robust confidentiality and data protection clauses to ensure compliance with privacy laws and regulations.

This is a complex issue, and companies should seek legal advice to ensure that their contracts are comprehensive and comply with all relevant laws and regulations. The exact requirements may also vary depending on the specific circumstances of the company and its value chain.

*Fig. 3. GPT-4 with Bing (Beta) suggesting topics to include in contracts with suppliers and customers. Powered by OpenAI, used with ChatGPT Plus May 25, 2023 version. Licensed under CC BY-NC 4.0.*

<sup>106</sup> For this purpose, we used the following prompt: 'What should a company include about these forthcoming requirements in its contracts with its suppliers and customers?' The full chat can be viewed at <<https://chat.openai.com/share/3ef10bc8-2198-45e4-9527-dba91582b383>>.

Next we asked GPT-4 to generate a first draft of a clause to be included in a contract with suppliers related to item 2 on the list, ‘Data Collection and Reporting’.<sup>107</sup> The clause it generated can be found in Figure 4 under the heading ‘Full Contractual Clause Text’. As already noted, our tests were meant to generate first drafts, with a human reviewing, verifying and editing the output and AI acting as an assistant. For our test purposes, we did not evaluate the output in more detail.

Finally, we asked GPT-4 to suggest a way to put the contents of the clause into a table-type format and present it in a layered layout with FAQ-type headings, a summary or explanation in business language, and the original full text.<sup>108</sup> The result can be found in Figure 4. GPT-4 also warned us: ‘this table is a guide and may need to be adjusted based on the specifics of your situation. It’s always a good idea to consult with a legal professional if you have questions’.

FAQ-Type Heading	Explanation in Business Language	Full Contractual Clause Text
What data do I need to collect?	You need to gather data about your business’s environmental, social, and governance (ESG) impacts. This could include things like your greenhouse gas emissions.	The Supplier shall collect and maintain all data necessary to comply with the environmental, social, and governance (ESG) reporting requirements as outlined in the Corporate Sustainability Reporting Directive (CSRD) of the European Union, or any other applicable law or regulation.

<sup>107</sup> Our prompt and the output it generated can be viewed at <<https://chat.openai.com/share/3ef10bc8-2198-45e4-9527-dba91582b383>>. In its response, GPT-4 included the typical caveat: ‘Please note that this is a generic draft and might need to be customised to fit the specific circumstances and legal requirements of your organisation and location. Always consult with a legal professional before implementing any legal documents or clauses’.

<sup>108</sup> Our prompts and the respective outputs, including the table shown in Figure 4, can be viewed at <<https://chat.openai.com/share/3ef10bc8-2198-45e4-9527-dba91582b383>>.

<p>How should I report the data?</p>	<p>Make sure the data is accurate and complete. Give it to your customer in a timely manner, so they have enough time to include it in their reports.</p>	<p>The Supplier shall ensure the accuracy, completeness, and reliability of all data collected and reported under this Agreement. The Supplier shall also ensure that the data is reported to the Company in a timely manner, consistent with the Company's reporting schedule and enough in advance of any reporting deadlines to allow the Company to include this data in its own reports.</p>
<p>In what format should I provide the data?</p>	<p>Provide the data in a way that your customer can easily understand and use. They might tell you how they want it presented.</p>	<p>The data shall be provided in a format and manner that is easily understandable and usable by the Company. The specific format may be determined by the Company and communicated to the Supplier from time to time.</p>
<p>What if something changes?</p>	<p>If something changes that could affect the data (like if you change your business practices), you need to tell your customer as soon as possible. You may also need to help them correct the data.</p>	<p>The Supplier shall promptly notify the Company of any changes or updates to the data that may affect the Company's reporting obligations. The Supplier shall also cooperate with the Company in making any necessary corrections or adjustments to the data.</p>
<p>What if the laws change?</p>	<p>If the laws or regulations change, you need to update the way you collect and report data to make sure you're still in compliance with the new rules.</p>	<p>In the event of any updates or changes to the CSRD or other relevant regulations, the Supplier shall update its data collection and reporting practices as necessary to comply with the updated regulations.</p>

*Fig. 4. GPT-4 suggesting a contract clause in a table-type format with FAQ-style headings and a layered layout. Powered by OpenAI, used with ChatGPT Plus May 25, 2023 version. Licensed under CC BY-NC 4.0.*

This example shows how generative AI tools can be used as writing and document design tools – again, to prepare initial drafts. In this example, different layers are displayed for different reader needs: FAQ-type headings for quick skim reading; the explanation layer for a deeper understanding; and the full text (generated by GPT-4 in our earlier test) for those who are interested in the details. In a similar manner, generative

AI Tools can generate text and a layout that can be used as a draft for sustainability reports, disclosures or other documents.

The opportunities offered by AI-powered web translators such as Google Translate and DeepL Translator<sup>109</sup> and writing assistants such as DeepL Write<sup>110</sup> are already widely used by many writers. AI-assisted translations, explanations and summaries can be used as first drafts in layering information, in a fraction of the time and with less effort than would be required otherwise.<sup>111</sup> We expect future AI tools to be able to generate timelines, flowcharts, swimlanes and other typical visual design patterns to explain contract clauses.<sup>112</sup> While AI tools cannot take the lead, their outputs can serve as a helpful starting point.

### 3.4.3. Generative AI in the Field of Legal Language

Large language models, such as Open AI's GPT-4, Google's BERT<sup>113</sup> and Cohere's language models<sup>114</sup> are trained on large amounts of data. However, because the training data contains very general texts, these models do not always capture the language used in some specific domains. A significant advantage, though, is that large language models can be fine-tuned with a relatively small sample of labelled texts. For example, FinBERT is tuned for financial texts. Huang, Wang and Yang performed an additional fine-tuning, which resulted in the FinBERT-ESG model. This model is specialised for ESG-related discussions. The model was trained

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109 Google Translate <[www.translate.google.com/](http://www.translate.google.com/)>; DeepL Translator <[www.deepl.com/translator](http://www.deepl.com/translator)>.

110 DeepL Write <[www.deepl.com/write](http://www.deepl.com/write)>.

111 For early layering experiments with GPT-3 by one of the authors of this paper, see Marcelo Corrales Compagnucci, Mark Fenwick and Helena Haapio, 'Digital Technology, Future Lawyers and the Computable Contract Designer of Tomorrow' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar 2022); Robert Waller, Stefania Passera and Helena Haapio, 'Layered Contracts: Both Legally Functional and Human-Friendly' in Kai Jacob, Dierk Schindler, Roger Strathausen and Bernhard Waihl (eds), *Liquid Legal – Humanization and the Law* (Springer 2022).

112 Similarly Waller, Passera and Haapio (n 111).

113 Jacob Devlin, Ming-Wei Chang, Kenton Lee and Kristina Toutanova, 'BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding' (v2, 24 May 2019) <[www.arxiv.org/abs/1810.04805](http://www.arxiv.org/abs/1810.04805)> accessed 1 February 2023.

114 Cohere, 'Making NLP Part of Every Developer's Toolkit' <[www.cohere.com/](http://www.cohere.com/)> accessed 29 June 2023.

by manually labelling sentences from company disclosures into four categories: 1) environmental, 2) social, 3) governance, and 4) non-ESG issues.<sup>115</sup>

The specificity of legal language can be seen as a challenge to the application of generative AI in the legal field. Common words can be used with very specific meanings, and legal language often also uses words that do not exist in natural language. This means that legal experts are needed in the development of the AI models.<sup>116</sup> However, this challenge can be overcome, as shown by FinBERT and its subsequent development. A number of commercial AI tools are available as well, such as ContractPodAi's Leah Legal Copilot, which can, among other things, review and summarise legal documents and provide first drafts, redlines and extracts.<sup>117</sup> Spellbook by Rally can suggest new clauses and entire sections for contracts, detect aggressive terms, list missing clauses and definitions and make negotiation suggestions.<sup>118</sup> Codify AI, in turn, is a GPT-4 based tool that is trained to find answers about legislation, so that legal information can be found and understood quickly and with ease.<sup>119</sup> It can also suggest follow-up questions and gives the citation information used in its answers.

In addition to monitoring and supervising AI tools and auditing the algorithms, human experts are also needed to train the tools. This typically involves building a model and analysing and labelling thousands of contracts or other documents, depending on what a particular tool is being asked to perform.<sup>120</sup> Even with careful testing, AI tools can still contain biases and errors. These can be difficult to identify and correct. Tools that use machine learning are typically 'black boxes' – the logic of their thinking and learning is not visible to their users, and it is difficult to

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115 Allen H Huang, Hui Wang and Yi Yang, 'FinBERT: A Large Language Model for Extracting Information from Financial Text' (2022) *Contemporary Accounting Research* 1, 3, 7, 13, 25 <<https://doi.org/10.1111/1911-3846.12832>> accessed 1 March 2023.

116 Rättzén (n 58) 230.

117 ContractPodAi, 'Generative AI Legal Assistant, Leah Legal Copilot' <<https://contractpodai.com/leah-copilot-ai-legal-assistant>> accessed 9 September 2023.

118 Spellbook by Rally, 'Draft Contracts 3x Faster with AI' <[www.spellbook.legal](http://www.spellbook.legal)> accessed 1 February 2023.

119 Codify AI, <[www.codifyai.com](http://www.codifyai.com)> accessed 30 August 2023.

120 Rättzén (n 58) 227.

understand how they make predictions.<sup>121</sup> When it comes to using AI in expert tasks, its trustworthiness is at the core. In addition to technological means, trust can be built through legislation, such as the forthcoming AI Act, discussed above.

#### **4. Conclusions**

With its flood of new legislation on sustainability, the EU wants to make it clear that sustainability is no longer voluntary. It affects both society and business. The EU's Sustainable Finance Strategy highlights the importance of sustainable investment in achieving sustainability goals. It also considers the role of day-to-day business activities and contracts throughout the whole value chain. Sustainability and business are thus linked in a meaningful way. Better business can foster a better society.

With many new legal requirements, the EU is using law as an important tool to achieve sustainability goals. However, conventional contracts and legal documents are written primarily to allocate and manage risk and liability. This often results in dense texts full of legalese – complex legal language written by lawyers for other lawyers. Studies have shown that such contracts and documents are not necessarily read or understood. So, they do not contribute to better business or a better society.

The proactive approach reverses the mindset. It focuses on future possibilities rather than past failures. Combined with possibility-driven design and responsibly used AI tools, it helps move from design thinking to doing. In the context of sustainability, possibility-driven, AI-assisted design can help navigate the plethora of sustainability legislation and overcome many of the problems associated with disclosures, reports and contracts. These are typically not engaging and are therefore often ignored by the intended audience. If sustainability information is not accessed, read and understood, it cannot promote sustainability.

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121 Amy McGovern, Ryan Lagerquist, David John Gagne II, G Eli Jergensen, Kimberly L Elmore, Cameron R Homeyer and Travis Smith, 'Making the Black Box More Transparent: Understanding the Physical Implications of Machine Learning' (2019) 100(11) *Bulletin of the American Meteorological Society* 2175, 2176.

In the financial context, the importance of financial well-being and financial literacy is already well recognised.<sup>122</sup> Similarly, we should shift the focus from a problem-oriented approach to legal well-being and legal literacy. In this paper, we have explored how possibility-driven, AI-assisted design can improve sustainability reporting and disclosure, as well as sustainable and responsible contracting. Using design patterns, templates, models and AI tools, information can be transformed and communicated more effectively, taking into account different user needs. One-size-fits-all solutions are not sufficient to promote sustainable actions.

To address the challenges and risks associated with AI tools, we emphasise the role of responsible use of AI tools. Even if the future brings us 'perfect' AI regulation and fully compliant AI tools, user risk will remain. When used responsibly, AI tools make it possible to generate, present and interact with information in ways that were not possible before. This opens up significant opportunities for both readers and writers of sustainability information, and possibility-driven legal design can provide a framework for balancing the needs and expectations of people, businesses and society at large.

### ***Bibliography***

- American Bar Association, 'Contractual Clauses Project' <[www.americanbar.org/groups/human\\_rights/business-human-rights-initiative/contractual-clauses-project/](http://www.americanbar.org/groups/human_rights/business-human-rights-initiative/contractual-clauses-project/)> accessed 13 February 2023
- Annola V, Haapio H and Koskela M, 'Interpreting Images in Contracts' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar 2022)
- Arbel YA and Becher SI, 'Contracts in the Age of Smart Readers' (2022) 90 *George Washington Law Review* 83
- Benoliel U and Becher SI, 'The Duty to Read the Unreadable' (2019) 60 *Boston College Law Review* 2255

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122 See Koskelainen and others (n 47) 1; OECD (n 47).

- Berger-Walliser G, Shrivastava P and Sulkowski A, 'Using Proactive Legal Strategies for Corporate Environmental Sustainability' (2016) 6 Michigan Journal of Environmental and Administrative Law 1
- , Bird RC and Haapio H, 'Promoting Business Success through Contract Visualization' (2011) 17 Journal of Law, Business & Ethics 55
- Bommarito J, 'Why We Built the Kelvin Legal DataPack' (*Kelvin Legal Data OS*, 21 August 2023), <<https://kelvin.legal/why-kelvin-legal-datapack/>> accessed 30 August 2023
- Chancery Lane Project, <[www.chancerylaneproject.org/](http://www.chancerylaneproject.org/)> accessed 29 June 2023
- Codify AI, <[www.codifyai.com](http://www.codifyai.com)> accessed 30 August 2023
- Cohere, 'Making NLP Part of Every Developer's Toolkit' <[www.cohere.com/](http://www.cohere.com/)> accessed 29 June 2023
- Commission Delegated Regulation (EU) 2022/1288 of 6 April 2022 supplementing Regulation (EU) 2019/2088 of the European Parliament and of the Council with regard to regulatory technical standards specifying the details of the content and presentation of the information in relation to the principle of 'do no significant harm', specifying the content, methodologies and presentation of information in relation to sustainability indicators and adverse sustainability impacts, and the content and presentation of the information in relation to the promotion of environmental or social characteristics and sustainable investment objectives in precontractual documents, on websites and in periodic reports [2022] OJ L196/1
- Consumer Financial Protection Bureau, 'Financial Well-Being: The Goal of Financial Education' (January 2015)
- ContractPodAi, 'Generative AI Legal Assistant, Leah Legal Copilot' <<https://contractpodai.com/leah-copilot-ai-legal-assistant>> accessed 9 September 2023
- Corrales M, Fenwick M, Haapio H and Vermeulen EPM, 'Tomorrow's Lawyer Today? Platform-Driven Legal Tech, Smart Contracts & the New World of Legal Design' (2019) 22(10) Journal of Internet Law 3
- Corrales Compagnucci M, Fenwick M and Haapio H, 'Digital Technology, Future Lawyers and the Computable Contract Designer of Tomorrow' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar 2022)
- , Haapio H and Fenwick M (eds), *Research Handbook on Contract Design* (Edward Elgar 2022)

- Council of the EU, 'Corporate sustainability due diligence: Council and Parliament strike deal to protect environment and human rights' <[www.consilium.europa.eu/en/press/press-releases/2023/12/14/corporate-sustainability-due-diligence-council-and-parliament-strike-deal-to-protect-environment-and-human-rights/](http://www.consilium.europa.eu/en/press/press-releases/2023/12/14/corporate-sustainability-due-diligence-council-and-parliament-strike-deal-to-protect-environment-and-human-rights/)> accessed 31 January 2024
- Creative Commons, 'About the Licences' <<https://creativecommons.org/licenses/?lang=en>> accessed 31 January 2023
- Delft Institute of Positive Design, 'Our Mission' <<https://diopd.org/about-us/mission/>> accessed 12 February 2023
- Devlin J, Chang M-W, Lee K and Toutanova K, 'BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding' (v2, 24 May 2019) <[www.arxiv.org/abs/1810.04805](http://www.arxiv.org/abs/1810.04805)> accessed 1 February 2023
- Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council [2005] OJ L149/22
- Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups [2014] OJ L330/1
- Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (CSRD) [2022] OJ L322/15
- Doherty M, Corrales Compagnucci M, Haapio H and Hagan M, 'A New Attitude to Law's Empire: the Potentialities of Legal Design' in Marcelo Corrales Compagnucci, Helena Haapio, Margaret Hagan and Michael Doherty (eds), *Legal Design: Integrating Business, Design and Legal Thinking with Technology* (Edward Elgar 2021)
- Doyle P and Passera S, 'Contract Design and Simplification – Is This Now a Must-do?' (2021) 14(56) *International In-house Counsel Journal* 7243
- Edelman R, 'The Practicalities of AI and Contract Management' *Contracting Excellence Journal* (6 June 2023) <[www.worldcc.com/Resources/Blogs-and-Journals/Contracting-Excellence-Journal/View/ArticleId/11552/The-Practicalities-of-AI-and-Contract-Management](http://www.worldcc.com/Resources/Blogs-and-Journals/Contracting-Excellence-Journal/View/ArticleId/11552/The-Practicalities-of-AI-and-Contract-Management)> accessed 11 September 2023

- European Commission, Directorate-General for Financial Stability, Financial Services and Capital Markets Union, Uličná D, Vincze M, Mosoreanu M, Hayet M, de Landsheer R, Järvi O, Bruggeman V, Sproge J, Fialon S, De Groen WP, Amariei C, Oliinyk I and Nagtegaal J, 'Disclosure, Inducements, and Suitability Rules for Retail Investors Study. Final report' (Publications Office of the European Union 2023)
- European Commission, 'Action Plan: Financing Sustainable Growth' (Communication) COM(2018) 97 final
- European Commission, 'Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937' COM(2022) 71 final
- European Commission, 'White Paper on Artificial Intelligence – A European Approach to Excellence and Trust' COM(2020) 65 final
- European Commission, 'Impact Assessment Report' SWD(2021) 344 final
- European Commission, 'Proposal for a Regulation of the European Parliament and of the Council establishing a European single access point providing centralised access to publicly available information of relevance to financial services, capital markets and sustainability' (ESAP proposal) COM(2021) 723 final.
- European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on European green bonds' COM(2021) 391 final
- European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on the making available on the Union market as well as export from the Union of certain commodities and products associated with deforestation and forest degradation and repealing Regulation (EU) No 995/2010' COM(2021) 706 final
- European Commission, 'Strategy for Financing the Transition to a Sustainable Economy' (Communication) COM(2021) 390 final
- European Commission, 'Proposal for a Regulation of the European Parliament and of the Council on nature restoration' COM(2022) 304 final
- European Commission, 'The European Green Deal' (Communication) COM(2019) 640 final
- European Parliament, 'Draft Compromise Amendments on the Draft Report Proposal for a regulation of the European Parliament and of the Council on harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts (COM(2021)0206 – C9 0146/2021 – 2021/0106(COD))'

- European Parliament Committee on Legal Affairs, 'Draft Report on the proposal for a directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 (COM(2022)0071 – C9-0050/2022 – 2022/0051(COD))' <[www.europarl.europa.eu/doceo/document/JURI-PR-738450\\_EN.pdf](http://www.europarl.europa.eu/doceo/document/JURI-PR-738450_EN.pdf)> accessed 13 February 2023
- European Union Agency for Fundamental Rights, 'Bias in Algorithms – Artificial Intelligence and Discrimination' (2022)
- Finnegan M, *User-Centered Design: A Key to Contract Simplification* (University of Vaasa 2021)
- Fontaine M and de Ly F, *Drafting International Contracts: An Analysis of Contract Clauses* (Brill 2009)
- Garante Per La Protezione Dei Dati Personali, Provvedimento dell'11 aprile 2023 [9874702] <[www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9874702#english](http://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/9874702#english)> accessed 30 August 2023
- Gardiner R, 'Only One Item on the Agenda for Today's Meeting of the Council of the European Union #CompanyLaw Working Party' [2024] LinkedIn <[www.linkedin.com/feed/update/urn:li:activity:7157652239174483968/](https://www.linkedin.com/feed/update/urn:li:activity:7157652239174483968/)> accessed 31 January 2024
- Goetz LH and Schork NJ, 'Personalized Medicine: Motivation, Challenges, and Progress' (2018) 109(6) *Fertility and Sterility* 952
- Haapio H, 'Quality Improvement through Proactive Contracting: Contracts Are Too Important to Be Left to Lawyers!' in *Proceedings of Annual Quality Congress (AQC), American Society for Quality (ASQ)*, vol 52 (American Society for Quality 1998)
- , *Next Generation Contracts: A Paradigm Shift* (Lexpert Ltd 2013)
- , Annola V and Koskela M, 'Ten Ways to Make the Interpretation of Images More Predictable' *Contracting Excellence Journal* (5 November 2020) <[www.worldcc.com/Resources/Content-Hub/View/ArticleID/10897](http://www.worldcc.com/Resources/Content-Hub/View/ArticleID/10897)> accessed 13 February 2023
- , Barton TD and Corrales Compagnucci M, 'Legal Design for the Common Good: Proactive Legal Care by Design' in Marcelo Corrales Compagnucci, Helena Haapio, Margaret Hagan and Michael Doherty (eds), *Legal Design: Integrating Business, Design and Legal Thinking with Technology* (Edward Elgar 2021)
- and Hagan M, 'Design Patterns for Contracts' in Erich Schweighofer, Franz Kummer, Walter Hötendorfer and Georg Borges (eds), *Networks. Proceedings of*

- the 19th International Legal Informatics Symposium IRIS 2016* (Österreichische Computer Gesellschaft OCG /books@ocg.at 2016)
- and Passera S, ‘Contracts as Interfaces: Visual Representation Patterns in Contract Design’ in Daniel M Katz, Ron Dolin and Michael J Bommarito (eds), *Legal Informatics* (CUP 2021)
- , de Rooy R and Barton TD, ‘New Contract Genres’ in Erich Schweighofer, Franz Kummer, Ahti Saarenpää and Burkhard Schafer (eds), *Data Protection / LegalTech. Proceedings of the 21st International Legal Informatics Symposium IRIS 2018* (Editions Weblaw 2018)
- Huang AH, Wang H and Yang Y, ‘FinBERT: A Large Language Model for Extracting Information from Financial Text’ (2022) *Contemporary Accounting Research* 1 <<https://doi.org/10.1111/1911-3846.12832>> accessed 1 March 2023
- Hurmerinta-Haanpää A, *The Many Functions of Contracts: How Companies Use Contracts in Interorganizational Exchange Relations* (Doctoral Dissertation, University of Turku 2021)
- IACCM, *The Purpose of a Contract: An IACCM Research Report* (2017) <[www.worldcc.com/Portals/IACCM/resources/files/9876\\_j18069-iaccm-purpose-of-contract-a4-2017-11-14-v1-webready.pdf](http://www.worldcc.com/Portals/IACCM/resources/files/9876_j18069-iaccm-purpose-of-contract-a4-2017-11-14-v1-webready.pdf)> accessed 13 February 2023
- Jevremovic N, ‘Enforcing Sustainability Clauses in Global Supply Chains with a Focus on Proactive and Relational Contract Theory: Case of SDG 12’ (2022) 25 *ZEuS Zeitschrift für Europarechtliche Studien* 393
- Ketola A, de Rooy R and Haapio H, ‘Comic Contracts 2.0 – Contracts that Have (and Give) a Voice’ in Rossana Ducato, Alain Strowel, and Enguerrand Marique (eds), *Design(s) for Law* (Ledizioni 2024)
- Koskelainen T, Kalmi P, Scornavacca E and Vartiainen T, ‘Financial Literacy in the Digital Age – A Research Agenda’ (2023) *The Journal of Consumer Affairs* 1 <<https://doi.org/10.1111/joca.12510>> accessed 1 March 2023
- The Legal Design Alliance, ‘What is legal design?’ <[www.legaldesignalliance.org/](http://www.legaldesignalliance.org/)> accessed 31 August 2023
- Loughran T and McDonald B, ‘The Use of EDGAR Filings by Investors’ (2017) 18(2) *Journal of Behavioral Finance* 231
- Maslow S, ‘No Safe Harbor in the “Contract Assurances” Required in the EU Directive Proposal’ (*AMM Blog*, 28 March 2022) <[www.ammlaw.com/blog/no-safe-harbor-in-the-contract-assurances-required-in-the-eu-directive-proposal.html](http://www.ammlaw.com/blog/no-safe-harbor-in-the-contract-assurances-required-in-the-eu-directive-proposal.html)> accessed 13 February 2023
- McGovern A, Lagerquist R, Gagne DJ (II), Jergensen GE, Elmore KL, Homeyer CR and Smith T, ‘Making the Black Box More Transparent: Understanding

- the Physical Implications of Machine Learning' (2019) 100(11) Bulletin of the American Meteorological Society 2175
- Microsoft, 'Azure Customer Data Protection' (31 December 2022) <<https://learn.microsoft.com/en-us/azure/security/fundamentals/protection-customer-data>> accessed 30 August 2023
- Milmo D, 'ChatGPT Reaches 100 Million Users Two Months After Launch' *The Guardian* (2 February 2023) <[www.theguardian.com/technology/2023/feb/02/chatgpt-100-million-users-open-ai-fastest-growing-app](http://www.theguardian.com/technology/2023/feb/02/chatgpt-100-million-users-open-ai-fastest-growing-app)> accessed 26 June 2023
- Norwegian Consumer Council, 'Ghost in the Machine – Addressing the Consumer Harms of Generative AI' (2023)
- OECD, 'OECD/INFE 2020 International Survey of Adult Financial Literacy' (2020) <[www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.htm](http://www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.htm)> accessed 1 March 2023
- OpenAI, 'Introducing ChatGPT Enterprise' <<https://openai.com/blog/introducing-chatgpt-enterprise>> accessed 8 September 2023
- Opinion of the European Economic and Social Committee on 'The proactive law approach: a further step towards better regulation at EU level' [2009] Official Journal of the European Union C175/26
- Pagidyala S, 'WARNING: This Paper Contains Model Outputs...' [2023] LinkedIn <[www.linkedin.com/feed/update/urn:li:activity:7077400934682685447/](http://www.linkedin.com/feed/update/urn:li:activity:7077400934682685447/)> accessed 27 June 2023
- Passera S, *Beyond the Wall of Contract Text: Visualizing Contracts to Foster Understanding and Collaboration within and across Organizations* (Aalto University 2017)
- Pohjonen S, 'Johdanto' [Introduction] in Soile Pohjonen (ed), *Ennakoiva sopiminen – liiketoimien suunnittelu, toteuttaminen ja riskien hallinta [Proactive Contracting – Planning, Implementing and Managing Risk in Business Transactions]* (WSOY Lakitieto 2002)
- Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L119/1
- Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector [2019] OJ L317/1

- Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 [2020] OJ L198/13.
- Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') [2021] OJ L243/1
- Responsible Contracting Project, 'The Mission' <<https://responsiblecontracting.org>> accessed 27 June 2023
- , 'The Toolkit' <<https://www.responsiblecontracting.org/toolkit>> accessed 6 November 2023
- Rossi A, Ducato R, Haapio H and Passera S, 'When Design Met Law: Design Patterns for Information Transparency' (2019) (122–3) *Droit de la Consommation – Consumenterecht* 79
- and Haapio H, 'Proactive Legal Design: Embedding Values in the Design of Legal Artefacts' in Erich Schweighofer, Franz Kummer and Ahti Saarenpää (eds), *Internet of Things. Proceedings of the 22nd International Legal Informatics Symposium IRIS 2019* (Editions Weblaw 2019)
- Rättzén M, 'Automated Contract Review: Challenges and Outcomes of a Data Annotation Framework' (2022) 62 *Jurimetrics Journal* 225
- Salo-Lahti M, Ranta M and Haapio H, 'AI Tools for Sustainability – Actionable Information for Both Humans and Machines' in Erich Schweighofer, Jakob Zanol and Stefan Eder (eds), *Legal Informatics as Science of Legal Methods. Proceedings of the 26th International Legal Informatics Symposium IRIS 2023* (Editions Weblaw 2023)
- Saloranta J and Hurmerinta-Haanpää A, 'Proactive Contract Theory in the Context of Corporate Sustainability Due Diligence' (2022) 6 *Journal of Strategic Contracting and Negotiation* 221
- Schönfelder D, Braun B and Scheltema M, 'Contracting for Human Rights: Experiences from the US ABA MCC 2.0 and the European EMC Projects' (*Nova Centre on Business, Human Rights and the Environment Blog*, 1 November 2022) <<https://novabhre.novalaw.unl.pt/contracting-for-human-rights-experiences-from-the-us-aba-mcc-2-0-and-the-european-emc-projects>> accessed 13 February 2023
- Simkins C, 'L2L Contracts: Thinking beyond B2C and B2B' (*Improving Contracts. Blog*) <<https://improvingcontracts.com/l2l-contracts-thinking-beyond-b2c-and-b2b/>> accessed 5 September 2023

- Smith B and Nowbar H, 'Microsoft Announces New Copilot Copyright Commitment for Customers' (*Microsoft Blog*, 7 September 2023) <<https://blogs.microsoft.com/on-the-issues/2023/09/07/copilot-copyright-commitment-ai-legal-concerns/>> accessed 10 September 2023
- Snyder D, Maslow S and Dadush S, 'Balancing Buyer and Supplier Responsibilities: Model Contract Clauses to Protect Workers in International Supply Chains, Version 2.0' (2021) 77 *The Business Lawyer* 115
- Soto M, Xue H and Tseklevs E, 'Design for Balance: Wellness and Health' (2022) 7(6) *Base, Diseño E Innovación* 4
- Spellbook by Rally, 'Draft Contracts 3x Faster with AI' <[www.spellbook.legal](http://www.spellbook.legal)> accessed 1 February 2023
- Strowel A, 'ChatGPT and Generative AI Tools: Theft of Intellectual Labor?' (2023) 54 *IIC – International Review of Intellectual Property and Competition Law* 491
- Sulkowski A and Jebe R, 'Evolving ESG Reporting Governance, Regime Theory, and Proactive Law: Predictions and Strategies' (2022) 59 *American Business Law Journal* 449
- Sustainable Terms of Trade Initiative, <[www.sustainabletermsoftradeinitiative.com/](http://www.sustainabletermsoftradeinitiative.com/)> accessed 29 June 2023
- Tamminen P, *Possibility-Driven Design in Design-Oriented Communities* (Aalto University publication series Doctoral dissertations 235/2016, 2016)
- Thaler RH, 'From Cashews to Nudges: The Evolution of Behavioral Economics' (2018) 108(6) *American Economic Review* 1265
- and Sunstein C, *Nudge: Improving Decisions about Health, Wealth, and Happiness* (Yale University Press 2008)
- United Nations, 'Transforming Our World: the 2030 Agenda for Sustainable Development' (Resolution adopted by the General Assembly on 25 September 2015, A/RES/70/1, 21 October 2015)
- Utterback J, Vedin B-A, Alvarez E, Ekman S, Walsh Sanderson S, Tether B and Verganti R, *Design-Inspired Innovation* (World Scientific Publishing Co. 2006)
- Wagner WE, 'Rethinking Legal Requirements: A Case Study of Incomprehensible Consumer Contracts in the United States' in Marcelo Corrales Compagnucci, Helena Haapio and Mark Fenwick (eds), *Research Handbook on Contract Design* (Edward Elgar 2022)
- and Walker W, *Incomprehensible!: A Study of How Our Legal System Encourages Incomprehensibility, Why It Matters, and What We Can Do About It* (CUP 2019)

Waller R, Passera S and Haapio H, 'Layered Contracts: Both Legally Functional and Human-Friendly' in Kai Jacob, Dierk Schindler, Roger Strathausen and Bernhard Waltl (eds), *Liquid Legal – Humanization and the Law* (Springer 2022)

Working Group of the American Bar Association (ABA) Business Law Section, 'Responsible Purchasing Code of Conduct: Schedule Q Version 1.0' <[www.americanbar.org/content/dam/aba/administrative/human\\_rights/contractual-clauses-project/scheduleq.pdf](http://www.americanbar.org/content/dam/aba/administrative/human_rights/contractual-clauses-project/scheduleq.pdf)> accessed 13 February 2023

WorldCC Foundation, Stefania Passera and Helena Haapio, 'Contract Design Pattern Library' <<https://contract-design.worldcc.com/>> accessed 31 January 2023

—, Passera S and Haapio H, 'Layering' (*Contract Design Pattern Library*) <<https://contract-design.worldcc.com/library/layering>> accessed 1 March 2023