

**Tiziano BUSSANI**

*Università degli Studi di Milano  
Fondazione Fratelli Confalonieri*

## **COMPLIANCE MONITORING AND ENFORCEMENT WITH VOLUNTARY STANDARDS: THE CASE FOR EXTERNAL REVIEWS ON GREEN BONDS**

### **Abstract**

Green bonds are debt instruments whose proceeds are earmarked to finance environmental-friendly ‘green projects’. To date, these are the most common securities explicitly supporting the transition to a more sustainable and climate-resilient global economy. Nevertheless, at the international level, green bonds are governed solely by voluntary standards set by private organizations and that cannot be directly enforced. Even though the practice of requesting third-party compliance assessments – named *external reviews* – has been established among issuers, the problem of greenwashing, which is the misuse of green bond proceeds, firmly persists. The paper investigates how such external reviews help to monitor and enforce compliance with green bond voluntary standards, whereas public enforcement lacks. First, it employs the analytical construct of Transnational Private Regulation to explore the regulatory dynamics underlying the international green bond market. Secondly, it reviews, analyses, and compares all different forms of external reviews, such as Certifications, Second-Party Opinions, Third-Party Assurances, and Ratings. Lastly, it investigates the regulatory role that external reviews play in monitoring and enforcing compliance within the international market practice and addresses the relevant issues. The paper may contribute to better understand the phenomenon of ‘compliance’ in private transnational rulemaking and the role such ‘compliance assessments’ play in the enforcement of voluntary regulations.

### **INTRODUCTION**

Financial markets are supposed to play a key role in financing the transition to a more sustainable and climate-resilient global economy. Since public resources alone are insufficient to deliver the Paris Agreement commitments and Sustainable Development Goals, States need to re-orient the private flows of capital towards socially responsible, environmental-friendly and climate-aligned investments<sup>1</sup>. This imposes a paradigm shift from ‘traditional finance’, in which investment is exclusively driven by the risk/profit analysis, to ‘Sustainable Finance’, in which Environmental, Social and Governance (ESG) considerations are integrated into investments decisions<sup>2</sup>.

---

<sup>1</sup> Indeed, one of the Paris Agreement goals is ‘*making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development*’ (Art. 2.1.c).

<sup>2</sup> On the difference between traditional and sustainable finance see, amongst others, P. Delimatsis, ‘Sustainable Finance’ in P. Delimatsis and L. Reins (eds.), *Encyclopedia on Trade and Environmental Law* (2021).

To unlock the ‘Sustainable Finance Revolution’<sup>3</sup>, however, reforms of international financial markets are needed. Yet, this reform process cannot be managed by States and International Organizations alone, whose rulemaking may prove inadequate<sup>4</sup>. Private regulation is crucial to driving this paradigm shift at the global level<sup>5</sup>. Indeed, through voluntary standards, private actors may well start to regulate products, services, and practices of Sustainable Finance at the transnational level, thus filling the vacuum left by public governance and regulation<sup>6</sup>.

In any case, the setting of private standards is juridically meaningless if compliance cannot be monitored and enforced. For this reason, in the absence of public regulatory supervision and enforcement, the verification of firms’ conformity with voluntary standards is often performed by specialized private actors through the provision of external assurance services, consisting of third-party compliance assessments which may be activated voluntarily. Such compliance practices are the only instruments that allow verifying compliance with the standards. Consequently, they turn out to perform a fundamental regulatory function within the respective regimes of private regulation.

In the emerging sector of Sustainable Finance, Green Bonds are the most common securities which expressly connect investments to sustainability goals. Namely, they are debt instruments whose proceeds are earmarked to finance ‘green projects’ delivering specific environmental and climate benefits. Clearly, this legal and financial innovation entails a huge regulatory challenge: What makes a green bond green? Who sets the relevant rules? How to monitor and enforce compliance?

In the absence of public regulation, the responses to this regulatory challenge came from the private sector in two directions. On the ‘substantive’ level, international voluntary standards, such as the Green Bond Principles, have been privately developed to support the growth of the market<sup>7</sup>. On the ‘procedural’ level, the practice of requesting third-party external reviews to verify compliance with the standards has become a common practice among the same issuers<sup>8</sup>. As a result, the private sector has managed to establish a privatized, voluntary, and decentralized transnational legal infrastructure capable of setting standards for the market as well as monitoring and enforcing compliance with the latter.

Nowadays, the green bond market has grown worldwide, carrying the promise of the sustainable finance revolution<sup>9</sup>. Following the success of green bonds and the growing appetite for sustainable investments, new kinds of ‘Sustainable Finance’ securities, such as social bonds, sustainable bonds, sustainability-linked bonds have been developing in market practice<sup>10</sup>. However, the existing private regulatory regime for those bonds, based on voluntary standards and external reviews, does not seem to be able to adequately prevent the risk of “greenwashing”, which is the misuse of the proceeds. Consequently, there needs to be legal scrutiny to address existing regulatory shortcomings.

The paper investigates how external reviews help to monitor and enforce compliance with green bond voluntary standards, whereas public regulation generally defaults, and traditional enforcement mechanisms are not applicable. Part I shows the regulatory dynamics of the international green bond

---

<sup>3</sup> This expression is taken from S. K. Park, ‘Investors as Regulators: Green Bonds and the Governance Challenges of the Sustainable Finance Revolution’ (2018) 54/1 *Stanford Journal of International Law*.

<sup>4</sup> On this aspect, see in particular: M. P. Vandenberg and J. A. Gilligan, ‘Beyond Gridlock’ (2015), 40/2 *Columbia Journal of Environmental Law*, with reference to climate change; and S. K. Park and G. Berger-Walliser, ‘A Firm-Driven Approach to Global Governance and Sustainability’ (2015) 52/2 *American Business Law Journal*, with reference to sustainability in general.

<sup>5</sup> On the role of private regulation see Part I.3.

<sup>6</sup> On this basis, public regulators may subsequently intervene with hard or soft law instruments to support and govern the growth of local markets.

<sup>7</sup> See Part I and in particular Part I.4.

<sup>8</sup> See in particular Part III.1.

<sup>9</sup> By this I mean the promise of a reform process of financial markets where Environmental, Social and Governance considerations are more and more integrated into the regulation of financial securities, markets, and actors.

<sup>10</sup> See note 17.

market and provides for a reconstruction of the underlying regulatory regime by employing the analytical construct of Transnational Private Regulation. Part II reviews, analyses, and compares all the different forms of external review, such as Certifications, Second-Party Opinions, Third-Party Assurances, and Ratings. Part III investigates the regulatory role that external reviews play in monitoring and enforcing compliance and addresses the relevant regulatory issues. In conclusion, the paper may contribute to better understand the phenomenon of ‘compliance’ in private transnational rulemaking and the role such ‘compliance assessments’ play in the enforcement of voluntary regulations.

## I. THE REGULATORY DYNAMICS OF THE INTERNATIONAL GREEN BOND MARKET <sup>11</sup>

### I.1. A market governed by private voluntary standards: the Green Bond Principles

Green bonds (GBs) are fixed-income debt instruments whose principal is earmarked to exclusively finance new or existing ‘green projects’, which include projects, assets or business activities delivering specific environmental or climate benefits<sup>12</sup>. GBs differ from plain vanilla bonds for their use of proceeds for environmental purposes and, consequently, the earmarking process of such proceeds to ensure the funding of those projects having specific green credentials<sup>13</sup>. The use and the earmarking of proceeds are generally set out by the issuers in a legal document compiled prior to the issuance, which is commonly referred to as the ‘green bond framework’. This shows the issuer’s environmental and climate goals, the eligibility criteria for ‘green projects’ selection, the use and the management of proceeds, as well as possible commitments for post-issuance reporting and external reviews.

However, to date, there is still no binding definition of ‘green bond’ and ‘green projects’, neither at the international nor at the domestic level. Consequently, in principle, a bond is self-labelled as green by the same issuer, and its ‘greenness’ basically depends on the quality of the eligibility criteria and the process set out in the green bond framework as well as its effective implementation.

---

<sup>11</sup> On the regulation and governance of green bonds, see: S. Breen and C. Campbell ‘Legal Considerations for a Skyrocketing Green Bond Market’ (2017) 31/3 *Natural Resources & Environment*; C. Clapp and P. Kamleshian, ‘Green bonds and climate finance’ in A. Markandya et al. (ed.) *Climate Finance: Theory and Practice* (2017); T. Ehlers and F. Packer, ‘Green Bond Finance and Certification’ (2017) *BIS Quarterly Review*; K. M. Talbot, ‘What Does Green Really Mean: How Increased Transparency and Standardization Can Grow the Green Bond Market’ (2017) 28/1 *Villanova Environmental Law Journal*; E. K. Wang, ‘Financing Green: Reforming Green Bond Regulation in the United States’ (2017) 12 *Brooklyn Journal of Corporate, Financial and Commercial Law*; S. K. Park, ‘Investors as Regulators: Green Bonds and the Governance Challenges of the Sustainable Finance Revolution’ (2018), cit.; P. Rose, ‘Certifying the ‘Climate’ in Climate Bonds’ (2018) 14 *Capital Markets Law Journal*; D. Siswantoro ‘Climate change concerns: the need for standardization of a second opinion on green bonds’ (2018) 200/1 *IOP Conference Series: Earth and Environmental Science*; C. Banahan, ‘The Bond Villains of Green Investment: Why an Unregulated Securities Market Needs Government to Lay Down the Law’ (2019) 43/4 *Vermont Law Review*; M. Doran and J. Tanner, ‘Critical challenges facing the green bond market’ (2019) *International Financial Law Review*; S. K. Park, ‘Green bonds and beyond: debt financing as a sustainability driver’, in B. Sjøfjell and C. Bruner (eds.) *Cambridge Handbook of Corporate Law, Corporate Governance and Sustainability* (2019); P. Deschryver and F. De Mariz, ‘What Future for the Green Bond Market? How Can Policymakers, Companies, and Investors Unlock the Potential of the Green Bond Market?’ (2020) 13 *Journal Risk and Financial Management*; L. Freeburn and I. Ramsay, ‘Green bonds: legal and policy issues’ (2020) 15/4 *Capital Markets Law Journal*; R. Jones et al., ‘Treating ecological deficit with debt: The practical and political concerns with green bonds’ (2020) 114 *Geoforum*; P. Rose ‘Debt for Climate: Green Bonds and Other Instruments’ (2020), available at SSRN.

<sup>12</sup> This definition is taken from Park (2018), cit., at 12. Categories of green projects include renewable energy, energy efficiency, pollution prevention and control, environmentally sustainable management of living natural resources and land use, terrestrial and aquatic biodiversity conservation, clean transportation, sustainable water and wastewater management, climate change adaptation, green buildings.

<sup>13</sup> I consider the use and the earmarking of proceeds as the ‘substantive’ and the ‘procedural’ legal innovations underlying GBs respectively.

In just a decade, the GB market has exponentially grown worldwide, evolving from a niche market dominated by multilateral development banks to one of the fastest-growing segments of financial markets, thus effectively becoming a leading component of Sustainable Finance<sup>14</sup>. GBs are now issued in many jurisdictions by multilateral banks, States and government-backed entities, private banks, financial institutions, and corporations. By the end of 2020, the cumulative global issuance of GBs since 2007 reached the USD 1 trillion milestone<sup>15</sup> and, as of October 2021, it further increased to the sum of USD 1.4 trillion<sup>16</sup>.

The development of the market has been primarily shaped by international private governance regimes, such as the ‘Green Bond Principles’ (GBPs) and the ‘Climate Bonds Standard’ (CBS), which set out voluntary process standards based on international best practices. In doing so, they establish definitions for green bonds and green projects, and specify voluntary requirements for issuers.

The GBPs<sup>17</sup> are compiled by the International Capital Market Association (ICMA), a trade association representing more than 600 financial institutions worldwide<sup>18</sup>. The GBPs provide voluntary guidelines focused on transparency, disclosure, and reporting, that issuers can use to develop their green bond framework. They consist of ‘*four core components*’, governing: (i) the use of proceeds; (ii) the process for project evaluation and selection; (iii) the management of proceeds; and (iv) post-issuance reporting. The GBPs recommend but do not mandate external reviews to assess compliance. Nonetheless, the ICMA also provides voluntary guidelines (the ‘Guidelines’) on how external reviews should be carried out<sup>19</sup>.

The CBS<sup>20</sup> is compiled by the Climate Bonds Initiative (CBI), an ‘*international, investor-oriented and not-for-profit organization*’ with the mission of mobilizing the USD 100 trillion bond market for climate change solutions<sup>21</sup>. The CBS combines sector-specific taxonomy-based process standards with a certification process managed by the same CBI<sup>22</sup>. This standard, which is fully aligned with the four components of the GBPs, is more stringent and specific than the GBPs<sup>23</sup>. The certification process, described in Part II.2, requires both pre- and post-issuance compliance assessments from accredited verifiers. The GBPs being incorporated into the CBS, I consider the latter as a particular form of external review, since it allows to certify compliance with both the CBS and the GBPs.

In addition, the International Standard Organization recently published the standard ‘ISO 14030’ on green debt instruments, thereby adding another international private standard to existing ones<sup>24</sup>.

To date, almost all issuers worldwide explicitly refer to the GBPs when implementing the green bond framework. Consequently, the GBPs have become the primary international standard for all market

---

<sup>14</sup> The first GBs were issued by the European Investment Bank and the International Bank for Reconstruction and Development in 2007 and 2008 respectively. The market, which started to dramatically grow since 2013, when municipalities and corporates entered the market, has expanded worldwide while embracing new markets, new kinds of issuers and underwriters, and new sub-types of bonds. On this regard, see Park (2018), cit., at 14-16.

<sup>15</sup> Climate Bonds Initiative (CBI), ‘Sustainable Debt Global State of the Market 2020’ (2021), available at [www.climatebonds.net](http://www.climatebonds.net).

<sup>16</sup> See [www.climatebonds.net](http://www.climatebonds.net) for those market data.

<sup>17</sup> ICMA, ‘Green Bond Principles’ (2021). The ICMA also issues voluntary standards concerning Social Bonds, Sustainable Bonds, and Sustainability-Linked Bonds. See [www.icmagroup.org](http://www.icmagroup.org) for further details.

<sup>18</sup> See [www.icmagroup.org](http://www.icmagroup.org).

<sup>19</sup> ICMA, ‘Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews’ (2021).

<sup>20</sup> CBI, ‘Climate Bonds Standard. Version 3.0’ (2020).

<sup>21</sup> See [www.climatebonds.net](http://www.climatebonds.net).

<sup>22</sup> The CBS specifically focuses on the Paris Agreement climate goals. Such ‘climate bonds’ are part of the broader category of green bonds.

<sup>23</sup> Indeed, the CBS establishes both pre- and post-issuance requirements which are based on a detailed taxonomy.

<sup>24</sup> The standard was published in September 2021. See [www.iso.org](http://www.iso.org) for further details.

participants, and the ICMA has emerged as the leading private regulator within the international sustainable debt market<sup>25</sup>.

Moreover, the GBPs are often used as the model standard by public regulators for the development of regional and domestic regulatory frameworks to support local GB markets. These initiatives include the ASEAN Green Bond Standards<sup>26</sup> and other standards set out in China, Brazil, Indonesia, Mexico, Morocco, and more<sup>27</sup>. Within the EU, it is currently under discussion the recent Commission's proposal for a 'Regulation on European green bonds', which aims at establishing a voluntary standard for high-level GBs opened to all issuers worldwide<sup>28</sup>.

Still, to date, almost all these regional and domestic regulatory initiatives are by design voluntary and non-binding, and they do not set any control and sanction mechanism to impose on market participants<sup>29</sup>. The paper focuses on the international GBs market, and therefore on the GBPs, the CBS, and international market practice; however, the same issues concern local markets and their respective regimes of voluntary soft-law regulation.

## **I.2. The enforcement vacuum and the practice of external reviews**

There is a direct enforcement vacuum regarding the GBPs, and in general all voluntary standards on GBs. To date, indeed, no public nor private authority in any jurisdiction has the mandate to control and enforce compliance with these standards when they are applied voluntarily, and no sanction mechanisms exists for those issuers who do not comply.

More precisely, the green bond framework is generally altogether irrelevant regarding domestic financial laws<sup>30</sup>, and no enforceable obligation to comply with the standards or execute the green bond framework is usually included in any GB agreement<sup>31</sup>. Consequently, there is no commitment that issuers will continue complying with the standards applied after the issuance<sup>32</sup>. Furthermore, limited disclosure on proceeds allocation and barriers to access the relevant information makes it difficult, in any case, to detect cases of greenwashing<sup>33</sup>.

As a result, compliance with the GBPs is not ensured by any legal enforcement mechanisms, but it is only supported by market-based incentives, such as reputation, competition with peers, and pressure from investors and clients<sup>34</sup>. With the growth of the market, these incentives have led more and more issuers to request external reviews to verify compliance with the standards applied<sup>35</sup>.

---

<sup>25</sup> The sustainable debt market includes green bonds, as well as social bonds, sustainable bonds, sustainability-linked bonds, all of them being regulated by the ICMA through appropriate voluntary standards. See note 17 above.

<sup>26</sup> ASEAN Capital Markets Forum (ACMF), 'ASEAN Green Bond Standards' (2018). These standards have been developed by the ACMF, the grouping of capital market regulators from all 10 ASEAN jurisdictions, in collaboration with the ICMA. See [www.theacmf.org](http://www.theacmf.org) for further details.

<sup>27</sup> For an overview on these initiatives, see Sustainable Banking Network, 'Creating Green Bond Markets – Insights, Innovations, and Tools from Emerging Markets' (2018).

<sup>28</sup> The proposal (COM(2021) 391 final), published on 6<sup>th</sup> July 2021, consists of a voluntary 'gold standard' for GBs coupled with appropriate certification requirements. The proposal has been built on the recommendations received from the Technical Expert Group (TEG) appointed by the Commission within the framework of the 2018 Action Plan on Sustainable Finance. See TEG (2019) 'TEG report on EU green bond standard'. For further information see the dedicated page on [www.ec.europa.eu](http://www.ec.europa.eu).

<sup>29</sup> To date, the only exception is the Chinese 'Green Bond Endorsed Project Catalogue', which is backed by the official sector and mandatory for certain types of transactions. The Board of the International Organization of Securities Commissions, 'Sustainable Finance and the Role of Securities Regulators and IOSCO. Final Report' (2020), at 14.

<sup>30</sup> Indeed, the green bond framework is provided outside the prospectus, usually on the issuer's website.

<sup>31</sup> On this specific topic, see Doran and Tanner (2019), *cit.*, exploring how the green bond market has developed in such a way that no actionable right concerning the green credentials of a GB is usually conferred on bondholders.

<sup>32</sup> Autorité Des Marchés Financiers (AMF) and Autoriteit Financiële Markten (AFM) 'Position Paper on Green / Social / Sustainable Bonds' (2019), at 2.

<sup>33</sup> This is also due to the many non-disclosable confidential information surrounding green projects' financing operations.

<sup>34</sup> Park (2018), *cit.*, at 20.

<sup>35</sup> See Part III.1.

External reviews are compliance assessments provided by third parties to confirm the alignment of a GB with relevant standards, namely the GBPs as the main one. They may be provided in the form of Certification, Second-Party Opinion, Third-Party Assurance, or Rating. To date, such external reviews are the only instruments to verify compliance with GB standards. Nevertheless, they are almost completely unregulated. Therefore, the problem of greenwashing, which is the misuse of GBs proceeds, becomes highly relevant, due to the lack of regulation and supervision on external reviews and potential conflict of interests. Indeed, since to date the only way to prevent greenwashing is to entrust external reviews, it is necessary to research on those practices to address the relevant regulatory issues.

### I.3 The green bond regulation as transnational private regulation

Before investigating the practice of external reviews, it is necessary to establish the theoretical framework to develop such analyses. In this regard, I employ the analytical construct of Transnational Private Regulation<sup>36</sup> (TPR) to frame the regulatory dynamics underlying the international GB market.

TPR concerns those regimes where private actors, ranging from trade associations to NGOs, from professional groups to technical standardization bodies, are involved in setting standards, monitoring compliance, and enforcing rules<sup>37</sup>. These private actors may exercise autonomous regulatory power, either as an alternative or complement to public regulation, or may implement delegated power conferred by international law or by national legislation<sup>38</sup>. In most cases, TPR consists of sector-specific voluntary standards whose aim is to address both market and governance failures, especially those concerning cross-border business activities<sup>39</sup>.

The scope of TPR is eminently regulatory, since the rules set out by the regulators, while orienting the conduct of the regulated, generally pursue (also) the interests of specific third-party beneficiaries or even public interests<sup>40</sup>. As such, TPR turns out to perform a typical public-regulatory function,

---

<sup>36</sup> On the concept of TPR, see: T. Bartley, 'Institutional emergence in an era of globalization: The rise of transnational private regulation of labor and environmental conditions' (2007) 113/2 *American journal of sociology*; D. Vogel, 'Private global business regulation' (2008) 11 *Annual Review of Political Science*; K. W. Abbott and D. Snidal, 'The governance triangle: Regulatory standards institutions and the shadow of the state' (2009) 44 *The politics of global regulation*; Id. 'Strengthening international regulation through transmittal new governance: overcoming the orchestration deficit' (2009) 42 *Vanderbilt Journal of Transnational Law*; T. Bartley, 'Transnational governance as the layering of rules: Intersections of public and private standards' (2011) 12/2 *Theoretical inquiries in law*; F. Cafaggi, 'New Foundations of Transnational Private Regulation' (2011) 38/1 *Journal of Law and Society*; C. Scott, F. Cafaggi and L. Senden, 'The conceptual and constitutional challenge of transnational private regulation' (2011) 38/1 *Journal of Law and Society*; D. Curtin and L. Senden, 'Public accountability of transnational private regulation: chimera or reality?' (2011) 38/1 *Journal of Law and Society*; F. Cafaggi, 'Transnational private regulation and the production of global public goods and private 'bads'.' (2012) 23/3 *European Journal of International Law*; F. Cafaggi, 'Introduction: The transformation of transnational private regulation: Enforcement gaps and governance design' in Id. (ed.), *Enforcement of Transnational Regulation* (2013); S. Cassese, E. D'alterio and M. De Bellis 'The Enforcement of Transnational Private Regulation: A Fictitious Oxymoron' in F. Cafaggi (ed.) *Enforcement of Transnational Regulation* (2013); P. Verbruggen, 'Gorillas in the closet? Public and private actors in the enforcement of transnational private regulation' (2013) 7/4 *Regulation & Governance*; F. Cafaggi, 'A comparative analysis of transnational private regulation: legitimacy, quality, effectiveness and enforcement' (2014) 2014/145 *EUI Department of Law Research Paper*; L. K. McAllister, 'Harnessing private regulation' (2014) 3/2 *Michigan Journal of Environmental & Administrative Law*; M. W. Scheltema, 'Assessing effectiveness of international private regulation in the CSR arena' (2014) 13 *Richmond Journal of Global Law & Business*; F. Cafaggi, 'The Many Features of Transnational Private Rule-Making: Unexplored Relationships Between Leges Mercatoriae and Leges Regulatoriae' (2015) 36 *University of Pennsylvania Journal of International Law*.

<sup>37</sup> This definition is taken from Cafaggi (2012), cit., at 697.

<sup>38</sup> Cafaggi (2011), cit., at 21.

<sup>39</sup> *Ibidem*.

<sup>40</sup> According to Abbott and Snidal (2009), cit., at 507, the nature of such private voluntary standards is properly regulatory since they aim to promulgate and implement voluntary standards in 'situations that reflect 'prisoner's dilemma' externality incentives (the normal realm of regulation), rather than coordination network externality incentives'. According to Cafaggi (2013), cit., at 3, the standards have regulatory purposes since they seek to address both market and governmental failures. In this respect, see also Cafaggi (2011) and (2012), cit.; McAllister (2014), cit.; Scheltema (2014), cit.

thereby differentiating it from traditional self-regulation<sup>41</sup>. In doing so, TPR has become a key governance instrument to discipline transnational businesses' conduct in many policy areas, including human rights, labour conditions, environmental protection, corporate social responsibility, and finance, as well as to design new markets and products<sup>42</sup>.

Among international law scholars, TPR is a disputed concept. Indeed, it embraces a broader understanding of the phenomenon of '*regulation*', which bridges over its traditional state-centric and command-and-control nature and includes also forms of private, nonstate rulemaking. Accordingly, TPR is '*transnational*', rather than international, since it has cross-border effects, but it collocates outside the domain of public, state-centric law-making characterizing international law<sup>43</sup>. Also, the term '*private*' in TPR underlies a wide-range definition of the private sphere, which is not grounded on a clear-cut public-private divide. Firstly, indeed, TPR encompasses a plurality of governance models, where regulators may also be multi-stakeholder entities, including public bodies as stakeholders or observers<sup>44</sup>. Secondly, the public sphere may interrelate with TPR in a plurality of ways, including informal support, collaborative rulemaking, coordination, delegation, and inclusion<sup>45</sup>. In doing so, public and private regulations often experience a process of mutual 'hybridization'<sup>46</sup>.

Although disputed, the concept of TPR helps understand the substantive regulatory nature of private standard-setting, which otherwise would be considered as a phenomenon of mere self-regulation and collocated outside the domain of the international legal system. Under a legal pluralist perspective, instead, TPR is considered as a form of rulemaking which pertains to international law, especially when it allows the pursuit of public interests and the protection of global public goods, such as those related to sustainable development and climate change.

In this context, the GBPs, and the CBS, may be qualified as regimes of TPR<sup>47</sup>. Indeed, these voluntary standards: (i) have cross-border relevance; (ii) are compiled by private entities; (iii) pursue clear regulatory objectives, since they aim to promote the integrity and transparency of the market in the interests of investors; (iv) rely on private actors to monitor and enforce compliance. Moreover, they substantially interact with public governance regimes in regulating local markets<sup>48</sup>. As a result, they turn out to properly regulate the market in the vacuum left by, and sometimes in coordination with, public regulators.

#### **I.4 The green bond regulatory system: standard setting, compliance monitoring, enforcement**

Considering the GBPs as a regime of TPR has significant theoretical and methodological implications, since it enables the debate on GBs to be set not just in terms of 'governance', but, more precisely, in terms of 'regulation'. This paradigm shift allows reconstructing the whole regulatory system of the international GB market as a set of principles, rules, and practices.

The starting point to properly reconstruct the system is the analysis of the formal rules, such as, as of now, the GBPs, the CBS, and the Guidelines. The principles may be inferred therefrom: for GBs, a fundamental principle is, clearly, the voluntary and non-binding nature of the standards and external

---

<sup>41</sup> On this distinction, see Vogel (2007), cit.; Cafaggi (2011), cit.; and Scheltema (2014), cit., at 265.

<sup>42</sup> Indeed, the growth of TPR is often associated, if not made dependent upon, the shortcomings of the regulatory state as a global regulator. Cafaggi (2011), cit., at 7.

<sup>43</sup> Scott, Cafaggi, and Senden (2011), cit.

<sup>44</sup> Cafaggi (2011), cit., at 31.

<sup>45</sup> Cafaggi (2011), cit.; McAllister (2014); Scheltema (2014), cit.

<sup>46</sup> Much TPR has hybrid nature since it involves the mixing of public and private legal instruments and collaboration between governmental and non-governmental actors. Hybridity concerns not only the setting of standards, but also compliance monitoring and enforcement.

<sup>47</sup> This conclusion may be also drawn with regard to the standard ISO 14030.

<sup>48</sup> In doing so, the ICMA and the CBI are often engaged with public regulators in forms of collaborative rulemaking, coordination, or delegation.

reviews. Considering the voluntary nature of applicable rules, special attention should be given to the analysis of market practice, to examine how those rules are concretely implemented.

In this paper, I try to reconstruct the international regulatory system of GBs by distinguishing between the functions of: (i) standard-setting; (ii) compliance monitoring; and (iii) enforcement, which are regularly used in the analysis of TPR regimes. Having introduced the regulatory role of the GBPs in setting the ‘substantive’ regulation for the international GB market and the lack of direct enforcement it implies, I will now focus on the practice of external reviews, to determine if, how, and with which limits they contribute to monitoring and enforcing compliance, thereby *de facto* performing a clear ‘procedural’ regulatory function within the system.

## II. EXTERNAL REVIEWS IN INTERNATIONAL MARKET PRACTICE<sup>49</sup>

### II.1. External reviews as third-party assurances

External reviews are third-party compliance assessments that issuers may request to verify the alignment of a GB with applicable standards. With the expansion of the market, four different forms of external review have distinctly emerged: (i) Certifications, such as the CBS, which are the most stringent form of external review; (ii) Second-Party Opinions, which are predominant within the market; (iii) Third-Party Assurances; and (iv) Ratings.

Although the costs of external reviews always fall on requesting issuers, according to the ‘issuer-pays model’, in 2020 the number of GBs with external reviews accounted for 89% of the total supply<sup>50</sup>. Other data from 2020 show that second-party opinions are the most popular form of external review, with a market share of 77%, followed by the CBS certification scheme, with a share of 15%<sup>51</sup>. Moreover, while opinions and certifications have increased over the last three years, third-party assurances and ratings have significantly dwindled in popularity, despite the growth of the market<sup>52</sup>.

External reviews belong to the broader universe of third-party assurance services. In the last two decades, the third-party assurance industry has emerged globally as a ‘*private sector compliance and enforcement infrastructure*’ in global commerce to verify firms’ compliance with performance codes and standards<sup>53</sup>. Third-party assurances have emerged as a result of the phenomenon of financial audits and have been developed alongside ISO standards and other initiatives of TPR<sup>54</sup>. Their role has also changed over time, evolving from simply facilitating contract enforcement, as an alternative to judicial or arbitral disputes, to institutionalize private enforcement mechanisms within the regimes of TPR, thereby substituting traditional forms of state-based enforcement<sup>55</sup>.

Consequently, assurance services end up performing traditional public-regulatory functions, such as those relating to compliance monitoring and enforcement<sup>56</sup>. Indeed, when referring to regimes of TPR, assurances services often constitute the sole means to perform such functions. In this case, the lack of regulation and state-based backstops on external assurances raises significant concerns regarding the limited independence and accountability of the relevant providers.

---

<sup>49</sup> The definitions provided in this Part have been elaborated on the base of: the GBPs, the CBS and the Guidelines; the literature cited at note 11; the information provided by the ICMA and the CBI in their respective websites [www.icmagroup.org](http://www.icmagroup.org) and [www.climatebonds.net](http://www.climatebonds.net); the analysis of external review reports available from the public databases of the ICMA and the CBI. The information reported herein is also drawn from these sources.

<sup>50</sup> CBI, ‘Sustainable Debt Global State of the Market 2020’, cit.

<sup>51</sup> *Ibidem*.

<sup>52</sup> *Ibidem*.

<sup>53</sup> M. Blair, C. A. Williams and L. Lin, ‘The new role for assurance services in global commerce’ (2007) 33 *Journal of Corporate Law* (citation from page 329). See also L. K. McAllister, ‘Regulation by Third-Party Verification’ (2012) 53 *Boston College Law Review*.

<sup>54</sup> *Ibidem*.

<sup>55</sup> *Ibidem*.

<sup>56</sup> *Ibidem*.



External reviews, meant as assurances services for the GBs market, are considerably unregulated. Only the ICMA Guidelines provide recommendations for external reviewers, consisting of ethical, organizational, and professional principles. Besides, they do not provide any standardization of the methodologies and procedures used by different external reviewers, and do not establish any supervision mechanism over them.

## II.2. The Climate Bonds Standard and Certification Scheme

Broadly speaking, certification may be defined as a mode of governance that combines the setting of standards with external monitoring and verification<sup>57</sup>. This governance regime typically entails: (i) the establishment of standards; (ii) a certification process to assess compliance with the standards; (iii) a certification mark or label; (iv) the accreditation of the certifier by the certification body; and (v) ongoing compliance monitoring<sup>58</sup>. If the certification process is approved, the certified entity is authorised to use the certification mark for commercial purposes. This allows the same standard-setter body that manages and supervises the whole certification process to monitor and enforce compliance over the applicants.

The CBS follows this scheme<sup>59</sup>. The certification process is divided into three phases<sup>60</sup>. Under the ‘*pre-issuance certification*’, the green bond framework and the list of eligible projects and assets are assessed for compliance by an approved verifier, which must have been previously accredited to the CBS Board, after fulfilling specific requirements. The Board reviews and approves the verification report and finally grants the certification. A ‘*post-issuance certification*’ is also required within two years to keep using the certification. The approved verifier assesses any updates to said documents during this last phase and a letter confirming the certification is released by the Board. Lastly, to meet the ‘*ongoing certification*’ requirement, the issuer must annually disclose to the CBI an update report on proceeds allocation until complete fulfilment.

Moreover, the issuer must inform the Board whether a certified bond is no longer conformant to the CBS. In that case, the Board could suggest corrective actions; however, if the certified bond is not conforming, the Board can revoke the certification altogether. Therefore, under the CBS, issuers are monitored during the whole lifespan of the bonds, and non-compliance may be sanctioned with the revocation of the certificate. For this reason, certification is considered the stronger form of external review.

## II.3. Second-Party Opinions

Second-Party Opinions (SPOs) may be defined as compliance assessments of the issuer’s green bond framework, provided by institutions with ESG expertise, to verify the ‘greenness’ of the underlying green projects or assets<sup>61</sup>. To this end, SPO providers review the framework of rules, regulations, and guidelines used by the issuer, and assess them for compliance with the four core components of the GBPs. SPOs are focused on the environmental impact of the projects, and they may also consider the issuer’s overarching objectives, strategy, policy, and processes relating to ESG sustainability as well as its overall ESG performance. The assessment is generally summarized in a detailed report of five-to-ten pages, which is normally disclosed by the issuer.

The assessment methodologies vary significantly from one provider to the next. Moreover, while some of them show their methodology in an appropriate publicly available framework, some others do not provide for any disclosure. Consequently, SPOs lack standardization and common metrics.

---

<sup>57</sup> D. U. Gilbert, A. Rasche and S. Waddock, ‘Accountability in a Global Economy: The Emergence of International Accountability Standards’ (2011) 21/1 *Business Ethics Quarterly*, at 27.

<sup>58</sup> P. Parikh, ‘Harnessing Consumer Power: Using Certification Systems to Promote Good Governance’ (2004) 34 *Environmental Law Reporter - News and Analysis*, at 2, cited in Scheltema (2014), cit., at 323.

<sup>59</sup> Park (2018), cit., at 25.

<sup>60</sup> CBI ‘Climate Bonds Standard. Version 3.0’ (2020).

<sup>61</sup> See note 49 above.

Besides, SPOs are usually provided solely at the time of issuance and do not require an ongoing or *ex-post* update<sup>62</sup>. Indeed, their scope is by design limited to the assessment of the green bond framework.

Furthermore, unlike accounting firms for financial statements, many SPO providers are not subject to stand-alone independence requirements<sup>63</sup>. Indeed, according to the Guidelines, SPO providers should generally be independent from the issuer and its advisers, but, if not, they may still provide SPOs as long as ‘*appropriate procedures such as information barriers*’ are implemented to ensure the independence of the SPOs and ‘*any concerns on the institution’s independence*’ are disclosed. Therefore, SPOs providers or their affiliates may provide advisory services to potential issuers concerning the green bond framework, and subsequently assess it for compliance through SPOs<sup>64</sup>. Since this situation is not uncommon in market practice<sup>65</sup>, SPOs may systemically lack independence due to potential conflicts of interest.

#### **II.4. Third-Party Assurances**

Third-Party Assurances (TPAs) may be defined as negative assurance reviews of the green bond framework and/or other internal documents, provided by an accounting or audit firm, against a designated set of standards and criteria, including the GBPs<sup>66</sup>. TPAs are generally carried out before the issuance. If subsequent, they may review the allocation of proceeds, based on issuers self-reporting. Usually, TPAs are two-three page reports where the statement of compliance is expressed in negative terms<sup>67</sup>.

TPA reports usually provide noteworthy descriptions of the assurance process but little to no detail regarding the bond’s characteristics and its underlying green projects<sup>68</sup>. Furthermore, reports include appropriate statements outlining the ‘limitations’ of the scope and the validity of the review as well as of the documents reviewed<sup>69</sup>.

Therefore, TPAs differ from SPOs in many aspects. First, they are provided by accounting or audit firms, instead of ESG experts; secondly, they are expressed in negative terms, instead of positive; thirdly, the reports are much shorter, limited, and lacking information regarding green projects’ characteristics. Nonetheless, the same concerns arise regarding potential conflicts of interest.

#### **II.5. Green Bond Ratings**

Green Bond Ratings may be defined as numerical evaluations on the level of ‘greenness’ of GBs, provided by credit rating agencies or ESG rating providers, based on specific benchmarks, methodologies, metrics, and datasets<sup>70</sup>. Each provider has its own rating system and scales to evaluate different performance indicators and data. The reports outline the green features of the bonds, the explanation of the employed rating criteria and methodology, along with the justification for the assigned scores for each component.

This form of rating differs from both credit rating and ESG rating. On the one hand, credit rating is a numerical assessment regarding the creditworthiness of a debtor or a debt instrument; in this case, the green credentials of a GB, if issued, are usually irrelevant, unless they could impact the issuer’s default probabilities. On the other hand, ESG rating is a numerical assessment regarding the overall

---

<sup>62</sup> Park (2018), *cit.*, at 30.

<sup>63</sup> A. Franklin et al., ‘Green Bond Second Party Opinions: Legal and Practice Considerations’ (2020), *Bloomberg Law*, 3.

<sup>64</sup> *Ibidem*.

<sup>65</sup> *Ibidem*.

<sup>66</sup> See note 49 above.

<sup>67</sup> TPAs use formulas such as ‘nothing has come to our attention to suggest that [the object of the review] is not, in all material aspects, conforming to [target standards] criteria’ and similar.

<sup>68</sup> Rose (2018), *cit.*, at 10.

<sup>69</sup> *Ibidem*, at 11.

<sup>70</sup> See note 49 above.

ESG performance of a firm; in this case, the green credentials of a GB, if issued, could be considered relevant as long as they could impact its overall environmental performance.

Compared to SPOs, Ratings generally entail a more in-depth assessment. In addition, they also forecast the effective implementation of the green bond framework after its issuance. However, unlike credit rating and similarly to ESG rating, scores from different rating systems are not immediately comparable due to the lack of standardized methodologies and metrics.

### **III. THE REGULATORY ROLE OF EXTERNAL REVIEWS IN COMPLIANCE MONITORING AND ENFORCEMENT**

#### **III.1. External reviews: from voluntary compliance to common practice**

Market data show that external reviews, embraced by the overwhelming majority of issuers worldwide, have now become a common practice within the international green bond market. In the 2019 Report on the EU Green Bond Standard, the Technical Experts Group on Sustainable Finance, appointed by the European Commission within its Action Plan on Sustainable Finance, has clearly outlined this shift about the European market, where the number of GBs with external reviews accounted for 98% in 2018<sup>71</sup>. However, this also applies to the international market, considering that externally reviewed GBs accounted for more than 80% globally in last three years<sup>72</sup>.

External reviews first appeared as the most efficient practice of ‘voluntary compliance’ for those issuers whose intent was to demonstrate the conformity to non-binding standards to investors and improve their reputation by increasing transparency, consistency and credibility for the products offered.

Concurrently with the expansion of the market, the pressure for credible ‘green GBs’, driven by the growing demand for sustainable investments, has persuaded more and more issuers to verify their bonds for compliance, to reassure potential buyers against the perceived risk of greenwashing caused by the lack of regulation and supervision. Thus, external reviews have become a valid external assurance infrastructure for the whole market.

Finally, external reviews have become common practice. As such, they now constitute an actual requirement for credibly accessing the market. Thereby, external reviews have effectively become a market-based private solution to the regulatory void surrounding compliance monitoring and enforcement.

As a result, external reviews turn out to *de facto* perform these otherwise missing regulatory functions. On the one hand, external reviews have become fundamental means of information to the investors regarding the bond’s greenness and compliance with the standards by providing insights and assessments; therefore, they conclusively provide monitoring within the market, at least at the pre-issuance level. On the other hand, they constitute a strong incentive for compliance by verifying the consistency with standards before the issuance, thereby becoming a *de facto* requirement to enter the market; therefore, they definitively constitute non-legal, indirect means for the *ex-ante* enforcement of voluntary standards.

In summary, external reviews have become common market practice most likely due to the compelling need of both issuers and investors, to increase the transparency and the integrity of a growing market solely governed by private standards and with no real institutionalized mechanism that could monitor and enforce rules. Without external reviews, indeed, there would not be any other

---

<sup>71</sup> Technical Experts Group ‘Report on the EU Green Bond Standard’ (2019), at 32.

<sup>72</sup> Data from the CBI. See: CBI, ‘Sustainable Debt. Global state of the market 2020’ (2021); Id., ‘Green Bonds. Global state of the market 2019’ (2020); Id., ‘Green Bonds. The state of the market 2018’ (2019), all available at [www.climatebonds.net](http://www.climatebonds.net).

instrument to verify compliance, with the result of leaving the substantive regulation of GBs, provided by the GBPs, without any procedural means to control over its effective implementation.

### III.2. External review providers as regulatory intermediaries

The rise of external reviews has led to the emergence of new actors within the GB market: the external reviewers. Such actors include ESG experts, consulting firms, ESG rating agencies, credit rating agencies, audit and accounting firms, all depending on the form of the external review provided. As shown in Part II, these different types of providers each have their distinctive methodologies and internal regulatory frameworks to perform external reviews.

The literature on the matter specifies that external reviewers act as ‘*information intermediaries*’<sup>73</sup>. Indeed, they collect, organize and distribute information on GB’s green credentials while assessing compliance, ultimately influencing the investors’ decisions. In this perspective, the many similarities between external reviewers and credit rating agencies have also been pointed out<sup>74</sup>.

However, the role of external reviewers is not limited to that of informational intermediaries. Instead, as explained above, they effectively perform substantially regulatory functions, therefore, acting precisely as ‘*regulatory intermediaries*’.

Regulation scholars have developed the concept of regulatory intermediaries to properly understand how different kinds of actors, including certification companies, accounting firms, credit rating agencies, and NGOs, play such influential and diverse roles in implementing, monitoring and enforcing rules, whether public or private, thereby effectively mediating the relationship between regulators and regulated<sup>75</sup>. Accordingly, they have been defined<sup>76</sup> as ‘*any actor that acts directly or indirectly in conjunction with a regulator to affect the behaviour of a target*’<sup>76</sup>. Their involvement in the regulatory system may be: (i) official or unofficial, that is within or outside a mandate from the regulator; and (ii) formalized or unformalized, that is based or not based on explicit and detailed rules<sup>77</sup>.

Taking this into consideration, it is evident that external reviewers act by all means as regulatory intermediaries within the GBs regulatory regime set out by the ICMA<sup>78</sup>. Their involvement in the regulatory system may be qualified as official, albeit unformalized: official, because the activity of external reviewers is expressly legitimated by the GBPs; unformalized, since the Guidelines set out only ethical, organizational, and professional principles.

In addition to being legitimated by the GBPs, the regulatory role of external reviewers is fully supported in market practice<sup>79</sup>. This mandates external review providers to be held as legitimate and effective regulatory intermediaries within the international regulatory regime for GBs. Accordingly, regulatory deficits on external reviews must be addressed to the ICMA, the latter being the leading international/transnational regulator.

### III.3. Pre-issuance versus post-issuance compliance

Two preliminary considerations are necessary before proceeding with the examination of existing regulatory shortcomings.

---

<sup>73</sup> Rose (2018), cit., at 12. See also Bahanan (2019), cit.

<sup>74</sup> *Ibidem*.

<sup>75</sup> K. W. Abbott, D. Levi-Flaur and D. Snidal, ‘Theorizing regulatory intermediaries: The RIT model’ (2017) 670/1 *The ANNALS of the American academy of political and social science*. See also the other contributions collected in the ANNALS.

<sup>76</sup> *Ibidem*, at 19.

<sup>77</sup> L. Brès, S. Mena and M. Salles-Djelic, ‘Exploring the formal and informal roles of regulatory intermediaries in transnational multistakeholder regulation’ (2019) 13/2 *Regulation & Governance*.

<sup>78</sup> Through the GBPs and the Guidelines.

<sup>79</sup> As shown in Part III.1.

First, the CBS certification is considerably different from all other kinds of external reviews. On the one hand, indeed, certification implies a trilateral relationship between the certifier, the issuer, and the approved verifier, where assessments for compliance are provided by the latter under the supervision of the former. In this way, verifiers can constantly monitor compliance, and in case of non-compliance they can sanction the issuers by revoking the certification. Therefore, certification is an institutionalized process for compliance monitoring and enforcement, regulated by the CBS in all aspects. On the other hand, SPOs, TPAs, and Ratings only involve two parties, the issuer and the reviewer, and practice their own methodology. Accordingly, if the issuer is non-compliant, there is no legal consequence or obligation for disclosure since, in principle, it can request another external review from a different provider. Consequently, these external reviews are highly fragmented as well as almost completely unregulated.

Second, the moment in which the compliance assessment is carried out, and therefore the scope of external review, is crucial. Beyond the certification, indeed, all other external reviews are normally provided only at-issuance. This means that the fulfilment of post-issuance requirements, such as self-reporting, the green bond framework execution, and the allocation of proceeds usually remain unverified.

It is, therefore, necessary to distinguish between pre-issuance and post-issuance compliance. ‘*Pre-issuance compliance*’ applies to the conformity of the green bond framework and other internal documents to applicable standards: hence, it refers just to the ‘input’ of a GB, that is the issuer’s commitment to fund green projects. ‘*Post-issuance compliance*’, instead, applies to all subsequent activities, such as the execution of the framework, self-reports on proceeds allocation, and impact reporting: hence, it refers to the ‘output’ of a GB, that is the actual funding of green projects.

Therefore, external reviews as common market practices manage to monitor compliance at issuing and enforce compliance with pre-issuance voluntary requirements. However, they do not perform any regulatory function relating to post-issuance compliance, thus underlining an alarming deficiency in international market practice.

#### **III.4. Addressing the regulatory issues on external reviews**

Based on this analysis of the regulatory system, three main regulatory issues concerning external reviews can be outlined.

##### *i. The lack of post-issuance compliance assessments.*

A major concern is the lack of post-issuance external reviews. Issuers may consider these reviews useless and unnecessarily costly and deem it sufficient to self-report on proceeds allocation to ensure transparency and compliance. Nonetheless, post-issuance reviews are crucial to complete the verification process over issuers.

Accordingly, the ICMA, as the leading private regulator, should consider promoting better practices on post-issuance compliance. To that end, it could recommend issuers to disclose a final report on the full allocation of proceeds and to get this report verified for compliance<sup>80</sup>. These recommendations would be part of GBPs, and as such, they would be considered by external reviewers in the assessment of a GB, notably through SPOs. This process could trigger positive competition among issuers for post-issuance compliance. Moreover, technologies such as blockchain and distributed ledgers would simplify and make proceeds-tracking and subsequent verification easier and cheaper.

##### *ii. The lack of independence and accountability of external reviewers.*

---

<sup>80</sup> UPDATE: the ICMA has introduced in the 2021 version of the GBPs the following new recommendation: ‘*Post issuance, it is recommended that an issuer’s management of proceeds be supplemented by the use of an external auditor, or other third party, to verify the internal tracking and the allocation of funds from the Green Bond proceeds to eligible Green Projects*’.

Part II illustrates a relevant issue regarding the risk of conflict of interest within the external review market. This risk pertains to the issuer-pays model underlying all external reviews; however, it is particularly exacerbated by the absence of legal accountability in cases of deceptive reviews, on top of a practical difficulty for the public to verify the information reported therein.

The CBS has addressed this problem by approving its verifiers, who among other things have to prove compliance with the 'ISAE 3000' standard<sup>81</sup>. On the other hand, the Guidelines only recommend reviewers to include statements on independence and conflict-of-interest policies in their reports, as well as to apply for the ISAE 3000 or other existing standards regarding assurance services.

Clearly, the Guidelines recommendations are insufficient to prevent and manage possible conflicts of interest. Moreover, it is not likely that an effective mechanism of supervision on external reviewers and a regime of accountability for deceptive reports will ever be implemented within private governance regimes. In such cases, appropriate public regulatory interventions are needed and unavoidable to make reviewers legally responsible for their assessments.

*iii. The lack of standardization and transparency of methodologies and data.*

The processes and outcomes of external reviews should be more consistent, homogenous, transparent, and possibly measurable to allow comparisons between different reports and providers. In this regard, the Guidelines provide reviewers with a shared reporting template; however, full methodology and datasets standardization and transparency are yet to be accomplished.

To this end, I believe that the development of green and climate taxonomies worldwide will form the base for the progressive convergence and standardization of assessment techniques and metrics. Impending ISO standard and Guidelines' updates should expedite this process, notwithstanding external reviews' data and methodologies disclosure should become an absolute requirement for any reviewer.

## CONCLUSIONS

In this paper, I examined how compliance with voluntary standards on green bonds is verified within the international private regulatory regime established by the Green Bond Principles. I discovered that, absent public regulation and traditional enforcement mechanisms, external reviews are the only instruments to verify compliance with those standards. Despite the fact that external reviews are merely recommended by the Principles and lack regulations, with the expansion of the market they have become a common market practice, hence *de facto* performing the otherwise missing regulatory functions of compliance monitoring and enforcement within the international market. Thereby I argued that external review providers should be considered 'regulatory intermediaries' alongside 'information intermediaries'. After analysing all different forms of external reviews, I pointed out the main regulatory issues concerning those practices. Firstly, I determined that only the certification process under the Climate Bonds Standard manages to monitor and enforce compliance over the whole lifespan of a green bond, whilst Second Party Opinions, Third-Party Assurances and Ratings are usually limited to assessing 'pre-issuance compliance'. Therefore, to prevent greenwashing, it is necessary to incentivize external reviews on 'post-issuance compliance' through appropriate recommendations to be included in the Principles. Secondly, I observed that, to manage potential conflicts of interest between issuers and reviewers, public regulation is needed to establish appropriate supervision mechanisms and forms of responsibility. Thirdly, I considered that the

---

<sup>81</sup> The ISAE 3000 'Assurance Engagements Other than Audits or Reviews of Historical Financial Information' is the standard for assurance over non-financial information issued by the International Auditing and Assurance Standards Board (IAASB), an independent standard-setting body on auditing, assurance, and related services. See [www.iaasb.org](http://www.iaasb.org) for further details.

evolution of the market will naturally bring more standardization and transparency of the assessment methodologies used by different reviewers.

In conclusion, I observe that private voluntary standards coupled with appropriate compliance practices, such as external reviews, are emerging as alternate forms of rulemaking in the international arena, especially in areas characterized by public governance failures, such as financial markets and sustainability. As in the case of green bonds, a private transnational legal infrastructure may emerge to regulate the market through voluntary rules and monitor and enforce compliance through third-party assessments. The scope of the research is to identify the deficits of these emerging regulatory regimes, so that private and public regulators can intervene to ensure that public interests are effectively pursued and protected.