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Due Process Rights in the Carbon Markets

by Lisa Hodes Rosen, Esq. & Adrienne Bossi, Esq.*

Introduction

The compliance and voluntary carbon markets are facing an identity crisis. Despite minor victories following the 16th Conference of the Parties of the United Nations Framework Convention on Climate Change in Cancun, Mexico, the voluntary carbon markets are attempting to grow in an uncertain regulatory world where the fate of the Kyoto Protocol and its market mechanisms hang in the balance. At the same time, the voluntary carbon markets have been able to survive through flexibility and strong self-governance.

Critics initially attacked the fledgling voluntary market for its lack of conformity to rules and attentiveness to real environmental action. Now, as the voluntary markets mature, stricter codes of conduct are emerging. Many of the almost two-dozen carbon offset certification standards that exist in the voluntary carbon markets today seek to establish credibility and accountability for voluntary environmental commitments. They seek to enforce their rules through transparency and reputation to ensure that these commitments are fulfilled in a real and verifiable way. Indeed, social and environmental product certification systems provide the guarantee that a carbon offset project has achieved promised emissions reductions. When a project’s emissions reductions have been verified against a standard’s rules and requirements, the standard will issue the project carbon credits equivalent to the emission reductions achieved. The credits are then considered “certified” and the credits can either be sold or retired.

CDM Process of Certification

The most prominent carbon offset certification standard in the compliance markets is the CDM. The Kyoto Protocol permits Annex I Parties (developed countries) to satisfy part of their emissions reduction targets by using Certified Emissions Reductions (“CERs”) created by registered CDM project activities. The CDM is a global market-based mechanism overseen by the CDM Executive Board (“EB”), which facilitates the creation and issuance of CERs from eligible CDM project activities. Before a CDM project can begin to generate CERs, it must proceed through the CDM project cycle. A preliminary matter, the nation hosting the CDM project must belong to the Kyoto Protocol as a non-Annex I (developing) country. After the project is designed using an approved methodology that quantifies the


Adrienne Bossi, Boston University School of Law, J.D. 2010; University of Massachusetts, Amherst B.A., Journalism 2005.
emissions reductions, a designated operational entity (“DOE”) is appointed to act as an independent auditor to validate and subsequently request registration of the proposed CDM project activity.\textsuperscript{15} The DOE then submits a validation report to the EB, thereby confirming that certain preset requirements are met.\textsuperscript{16} The EB then decides whether to formally accept the DOE’s recommendation and if so, it “must register CDM projects within eight weeks of the [DOE’s] request unless three members of the CDM Executive Board, or a CDM participant, require a review of the proposed activity.”\textsuperscript{17}

Once registered, the project participants implement the CDM project. A second and different DOE is appointed to monitor the project during implementation and to ultimately confirm that the project’s resulting greenhouse gas (“GHG”) reductions are real, measurable, and verifiable below an approved baseline.\textsuperscript{18} This second DOE requests the EB to issue CERs after it is satisfied that the GHG reductions are “appropriate”.\textsuperscript{19} There is then a fifteen-day window during which time a three-member panel of the EB or a CDM participant can request a review of the DOE’s findings.\textsuperscript{20} However, “[b]ecause the scope of the review is limited to issues of fraud, malfeasance, or incompetence of the [second DOE], issuance of CER[s] by the Executive Board . . . is almost . . . automatic.”\textsuperscript{21} If no review is requested, the CER “issuance is considered final.”\textsuperscript{22}

The Voluntary Carbon Markets

In contrast to the compliance markets, voluntary carbon markets do not impose a mandatory cap on greenhouse gas emissions. Instead, they rely on participants’ voluntary commitments to reduce emissions. A unique dynamic has developed between these two types of markets in which the voluntary markets often appear to act as a test-drive for companies facing the prospect of the enactment of complex, and sometimes confusing, compliance markets.\textsuperscript{23} Indeed, the voluntary markets buoyed the credibility of the overall carbon markets when the compliance markets were most vulnerable. This was particularly evident following the failures at the 15th Conference of the Parties (“COP15”) where regulators hesitantly noted the Copenhagen Accord.\textsuperscript{24} The robust growth of the voluntary markets is thus a logical response to the Kyoto Protocol’s complex rules, disparities enforcement and inefficiencies that have resulted in CDM capacity bottlenecks and slowed credit issuances.\textsuperscript{25}

In the past, the voluntary markets were accessed through the Chicago Climate Exchange (“CCX”), a voluntary but legally binding cap-and-trade program, or through an over-the-counter (“OTC”) purchase or sale. However, CCX’s emissions trading program shut its doors at the end of 2010.\textsuperscript{26} Consequently, OTC transactions will now dominate the market.

Most of the transactions in the OTC market involve offset credits from third-party certification standards.\textsuperscript{27} In 2008 and 2009, more than ninety percent of the credits transacted in the voluntary markets were certified by a third-party standard.\textsuperscript{28} Over the last few years, the following certification standards have emerged as leaders in the voluntary market: the Verified Carbon Standard (“VCS”), the Climate Action Reserve (“CAR”), the American Carbon Registry (“ACR”), and the Gold Standard (“GS”).\textsuperscript{29}

The VCS was launched in 2007.\textsuperscript{30} It was founded by The Climate Group, the International Emissions Trading Association, and the World Business Council for Sustainable Development.\textsuperscript{31} The World Economic Forum and approximately one thousand carbon market stakeholders also assisted in developing the standard.\textsuperscript{32} VCS issues credits called Verified Carbon Units (“VCUs”) for carbon offset projects throughout the world that can demonstrate emissions reductions that are real, measurable, permanent, additional, independently verified, unique, transparent, and conservative.\textsuperscript{33}

CAR, formerly the California Climate Action Registry (“CCAR”), was established in 2001 after a group of CEOs lobbied the state of California to create a mechanism by which they could track their firms’ early emissions reductions in anticipation of the future state and potential federal regulation.\textsuperscript{34} CCAR was thus born from a state mandate.\textsuperscript{35} The program eventually separated from the state to be incorporated as a nonprofit organization and, in 2009, the organization began transitioning its tracking and inventory operations to The Climate Registry, a national nonprofit body established in 2007 that was actually modeled after CCAR.\textsuperscript{36} In turn, CAR flip-flopped its role as part of CCAR to become the new parent organization focusing on developing an offset credit, Climate Reserve Tonnes (“CRT”) that apply to GHG reduction projects within North America.\textsuperscript{37}

ACR was established in 1996 by the Environmental Defense Fund and Environmental Resources Trust.\textsuperscript{38} It was the first of its kind in the United States and over the last fifteen years, it has issued over thirty million offset credits.\textsuperscript{39} These credits, called Emission Reduction Tons (“ERTs”), are issued in accordance with ACR’s requirement that reductions are “real, measurable, permanent, in excess of regulatory requirements and common practice, additional to business-as-usual, net of leakage, verified by a competent independent third party, and used only once.”\textsuperscript{40} ACR’s reach is not limited to the United States and accepts international projects.\textsuperscript{41} In 2007, ACR became an “enterprise” of Winrock International, an American nonprofit organization working globally to “empower the disadvantaged, increase economic opportunity, and sustain natural resources.”\textsuperscript{42}

The GS Foundation, which manages the GS carbon certification scheme, was founded in 2003 by a network of large nongovernmental organizations (“NGO”), including the Worldwide Fund for Nature, Helio International, and SouthSouthNorth, in response to criticism that the Kyoto Protocol’s CDM did not adequately address sustainable development.\textsuperscript{43} These NGOs developed the GS as a complement to renewable energy or energy efficiency CDM projects through the addition of a sustainability assessment.\textsuperscript{44} If a project proponent successfully applied the GS’s sustainability assessment to its CDM project, then the GS would provide the CDM project with an additional GS label.\textsuperscript{45} The project could then sell the GS-labeled CERs for an additional premium in the marketplace.\textsuperscript{46} Subsequently, in 2006, the GS launched its voluntary standard whereby it issues GS Voluntary Emission Reductions (“VERs”) to renewable energy or
energy efficiency projects that successfully meet the Standard’s rigorous technical and sustainable development criteria.57

Unlike the CDM, which was born out of climate diplomacy and is therefore vulnerable to global politicking, VCS, CAR, ACR, and GS operate in an unregulated market, free from bureaucracy, political hostage-taking, and other possible effects of governmental intervention. This gives VCS, CAR, ACR, and GS freedom to respond to market demands through innovation, limited only by their own creativity and available resources. As such, these standards can experiment with a variety of governance, financial, and technical mechanisms. Indeed, experiments in the voluntary carbon markets—the successes and failures alike—can set examples for the compliance markets as they develop over time.

These third party standards play another critical role in the voluntary markets, acting as civil regulatory bodies to build consumer trust by ensuring a consistent level of quality. Thus, voluntary certification standards become “distinctive . . . because they transform the global marketplace by developing ‘deliberative and adaptive governance institutions designed to embed social and environmental norms in the global marketplace that derive authority directly from interested audiences, including those they seek to regulate, [but do not derive their authority] from sovereign states.”48 Such non-state global governance institutions are known as non-state market driven (“NSMD”) governance systems.59 The application of the NSMD analysis to voluntary carbon certification standards is appropriate because the framework was originally developed to explain forest certification, which is similar to carbon certification.50

VCS, CAR, ACR, and GS must establish credibility, build consumer trust, develop a strong reputation in the marketplace, and operate with a certain degree of political integrity to be considered as relevant and appropriate examples for the CDM. The NSMD governance system, an academic analytical framework, provides a framework from within which to measure these characteristics.

**The NSMD Framework—A Measure of Market Credibility**

It is generally accepted that a NSMD system displays five features.51 First, a NSMD system’s authority is not derived from the state.52 That is, “there is no use of state sovereignty to enforce compliance.”53 This element is arguably the most important because of the lack of a connection with the state, which distinguishes NSMD systems from public-private partnerships or, in the case of carbon markets, the standard-setting CDM, which derives its authority from an international agreement between nations.54 Second, NSMD systems must have established governance mechanisms,55 whereby “NSMD institutions constitute governing arenas in which . . . adaptation, inclusion, and learning over time occur . . . across a wide range of stakeholders.”56 At its core, this element rests on democratic ideals of fairness, accountability and transparency, and its intent is to promote “good practice” and “practical reason.”57 Third, the NSMD’s authority is market-based,58 deriving its power from the market and civil society.59 Fourth, the NSMD is concerned with social impacts.60 A NSMD governance system seeks to address global issues that private firms are not incentivized to address, and which governments may not have the capacity or, in the case of climate change mitigation in the United States, the political will to remedy.61 Finally, the NSMD system has enforcement mechanisms and mandatory requirements.62 These are rules and regulations where compliance can be verified and non-compliance can be punished.63 “Once firms sign on, they are subject to governance, rules and enforcement that have more in common with state regulation than standards of voluntary bodies that can be abandoned with little consequence.”64

While the NSMD framework omits any express reference to due process rights for the NSMD system’s constituents, it is recognized that “entities that are affected by the decisions of a regulatory body [should] have access to a full and fair review of the decision in question.”65 If NSMD systems are akin to democratic regulatory bodies, then it would seem logical to expressly incorporate the protection of individual rights into the NSMD theoretical analysis. The exclusion of due process principles would appear to contravene the democratic ideals upon which the NSMD systems are founded and rely.

It is possible that the second element of a NSMD system, related to governance mechanisms, could be interpreted to include due process rights. Within the governance aspect, “good practice” is defined in terms of “fairness and procedural legitimacy,” but there is no consensus as to how to achieve it.66 Likewise, “practical reason” relates to ideas of procedural fairness.

Practical reason builds on the notion that reasons derive from interpretative and dialogical processes (e.g., legal processes) in which intersubjectively validated knowledge and normative understandings of fairness play a role. [Practical reason] . . . concerns the epistemic requirements for democratic practice, which . . . requires “discursive validation” [and] “ideal speech” conditions where validity claims can be assessed.57

In other words, constituents should be afforded the opportunity to challenge validity claims and be heard.68 “Practical reason,” however, is interpreted on a case-by-case basis in accordance with specific historical context and cultural values.69

Status as a NSMD system is important as these certification systems pursue legitimacy as civil regulatory bodies.70 Otherwise, standards that cannot meet the NSMD test risk categorization as merely a string of coordinated activities adopted by self-serving stakeholders. Under the existing five-part test, three out of the four voluntary certification standards have the elements of a NSMD system and one standard, CAR, which has gained credibility through its connections with the State of California, may be more aptly described as a public-private partnership.

**VCS**

Under the five-part NSMD test, VCS meets all of the requirements. As an industry-created standard, its power is not derived from the state. It is governed by the VCS Standard
2007.1 and Program Guidelines 2007.1, which outline the rules and methodologies required of project developers, verifiers, and validators. VCS meets the third element of the original NSMD analysis because its authority is derived from the market. In 2009, VCS held thirty-five percent of the transaction volume in the voluntary market. VCS also meets the fourth and fifth NSMD elements because it is concerned with the social domain (its mission is climate change mitigation) and its rules are enforceable. The VCS Secretariat operates the Standard on a day-to-day basis and is responsible for, \emph{inter alia}, a mechanism to license auditors as VCS validators and verifiers. In addition, “[t]he VCS Board reserves the right to sanction validators and verifiers, project proponents and registry operators based on evidence of an improper procedure.”

CAR

The first NSMD prong, prohibiting the standard to have derived any power from the state, is where CAR falls short because it was created by the State of California. Despite its subsequent separation from the state to become an independent nonprofit organization, CAR is still recognized and rewarded for its early connection, and may thus be more appropriately categorized as a public-private partnership. In \textit{arguendo}, supposing CAR did comply with the first NSMD prong, the standard would easily satisfy the remaining original requirements: CAR has established its own governance mechanisms with the Verification Program Manual and Climate Action Reserve Program Manual; its power is market-based (it had thirty-one percent of the voluntary market share in 2009); it is concerned with climate change, and it has instituted enforcement mechanisms and mandatory requirements in the form of a detailed program schedule and penalty structure.

ACR

Like VCS, ACR also meets the five NSMD requirements. First, as a standard founded and owned by NGOs, its power is not state-based. Second, it also has strict rules. Generally, ACR’s project cycle is similar to that used by VCS. ACR easily meets the third and fourth elements because its authority is market-based, with four percent of the voluntary market share, and its mission is also to mitigate climate change. ACR’s rules are enforceable, but it relies primarily on domestic courts. The Guidelines specifically state that any legal responsibilities or rights of ACR or parties involved (verifiers, proponents, members, etc.) are outlined in the contractual agreements they sign with one another. For example, the attestation agreement signed by parties seeking to become ACR-approved verifiers requires the parties to obtain their own liability insurance, agree to limit ACR’s liability, indemnify ACR, and submit any claims that may not otherwise be provided for in the contractual language to the courts and laws of Arkansas.

GS

The GS also meets the five-part NSMD test. First, like ACR, GS was founded by NGOs. Second, it has strict governance mechanisms. The Gold Standard Requirements (“GSR”) detail a multi-step project cycle for its voluntary standard in which the project proponent must first assess the eligibility of the project against the GS’s criteria, including strict rules regarding additionality and sustainable development. The third NSMD factor, requiring market-based authority, is also satisfied here. In 2009, GS accounted for seven percent of the transaction volume in the voluntary market. Fourth, the GS mission’s concern for social impacts is two-fold: it seeks to promote sustainable development and mitigate climate change through its offset projects. Finally, the GS rules are enforceable. The GS Terms and Conditions (“GSTC”) provide that a breach of its rules may be prosecuted as a violation of [GS’s] intellectual property rights. In addition, Section 10 of the GSTC addresses sanctions, including fines and/or the freezing of a GS registry account, for a violation of the GS’s rules.

\textbf{Private Party Dispute Resolution Mechanisms in the Carbon Markets}

There are several types of potential disputes that may arise between a private party project proponent and a certification standard. The first type involves the investment relationship. Project development requires large up-front capital expenditures and, because certification is a time-consuming process, investors may not see returns for a few years. Consequently, even a slight delay may change the investment analysis. Second, disputes can arise over registration, issuance, or revocation decisions. These disputes could involve a myriad of scenarios, such as when a standard rejects a project, revokes credits based on changes to the project, or where one project participant claims that the certification standard issued credits to the wrong party. Third, disagreements over bookkeeping could escalate into a potential dispute over, for example, an allegedly erroneous transfer. Fourth, a certification standard may invalidate credits where it has reason to believe the project documentation was fraudulent. Finally, disputes could arise in connection with the validation or verification reports from the third-party auditor on issues including, but not limited to, carbon quantification or the correct application of a methodology. A dispute could also arise when the certification standard accepts an allegedly defective validation or verification report.

Litigation may be the obvious recourse in the event of a dispute between a private party project proponent and a certification standard. However, here, litigation may be an inadequate mechanism for several reasons. A compliance market certification standard, such as the Clean Development Mechanism, may be afforded sovereign immunity. In the case of a private certification standard, domestic court systems may not have the technical expertise to properly adjudicate registration, issuance, revocation, or auditing decisions, and hiring the appropriate expert witnesses can be expensive for both sides. Furthermore, project proponents may not reside in the same country as the private certification standard, and a foreign party may distrust the ability of a foreign court to be impartial. Private arbitration may be a better forum for disputes with public or private certification standards because it has the potential to be less time consuming, less expensive, and more efficient.
The independent consultant will be selected by the VCS Secretariat and paid for by the project proponent demanding the review. Ultimately, though, the final decision rests with the VCS Board.

**CAR**

CAR offers a means of recourse for parties adversely affected by its decisions that is tailored for the specifics of its program. For example, CAR explains that disputes between a verifier and project developer are to be handled by the verifier’s internal procedures, but nonetheless offers itself as an informational resource to assist in the resolution process. However, if the parties cannot reach resolution through private negotiation, then the parties can look to CAR to play the roles of judge, jury, and prosecuting attorney. Once the verification is complete, a committee of at least three CAR staff members will review the submitted paperwork and interview the verifiers and project developers involved before issuing a final, written determination.

Likewise, disagreements with regard to CAR’s decisions affecting verifiers and project developers are also addressed in CAR’s Verification Guidelines. Upon written request for appeal, CAR will assemble a Dispute Resolution Committee containing “an odd number of individuals, including at least one Reserve staff member not directly involved in the case, one Reserve Board member, [and] a representative from an appropriate oversight agency—potentially . . . [a] regulatory or government agency—that is knowledgeable of Reserve policies and procedures.”

The Dispute Resolution Committee will review all relevant paperwork and is authorized to consult outside experts. A decision is reached by majority vote and is considered final and not appealable.

**ACR**

ACR, unlike its aforementioned counterparts, does not detail any appeal process in its Program Guidelines and although the framework for the program provides project developers opportunities to resolve issues discovered in the verification process, there is no express recourse in the event of a material disagreement or breakdown of communication. Instead, as discussed above, ACR relies primarily on domestic courts for dispute resolution.

**GS**

GS also provides an appeals process that protects constituents’ due process rights in a manner akin to traditional governmental regulatory bodies. In July 2010, GS released a proposal for an appeals procedure to provide project developers with recourse against adverse decisions by GS regarding registration, issuance, or labeling. The purpose of the appeals procedure is to “fill the gap in remedies between the decisions from the certification standard and the consequences for project developers.” It is the first of its kind in the voluntary carbon markets.

Although the GS appeals process is in its pilot phase, it is currently the most developed dispute resolution mechanism in the voluntary carbon markets. If successful, it can serve as an
example for other certification standards—both in the compliance and voluntary markets—that do not currently afford their project proponents the same level of independent review.

The GS Rules for Appeals on Registration, Issuance and Labeling (“Arbitration Rules”), which are based on the International Bureau of the Permanent Court of Arbitration’s (“PCA”) “Optional Rules for Arbitration of Disputes Relating to the Environment and/or Natural Resources,” (“Environmental Rules”), will govern the arbitration procedure.121 Created in 2001, the Environmental Rules fill a gap in international environmental dispute resolution by providing a forum in which governments, NGOs, private entities, and individuals can seek redress.122 Certain changes have been made to the Environmental Rules to account for the particular characteristics of GS projects and the GS project cycle.123

Initially, the scope of the proposed appellate procedure would be limited to project proponents, project applicants, and project owners.124 These parties would be required to submit their disagreement with a GS decision to mediation within six weeks.125 If the mediation proves unsuccessful, the parties would have the option to appeal the dispute to the PCA at The Peace Palace in The Hague, who will serve as the registrar of proceedings and will channel communications between or among the parties.126

In accordance with the GS Arbitration Rules, the parties will have the option to choose one arbitrator or a tribunal of three arbitrators, with opportunities to challenge the appointment of an arbitrator on various grounds.127 The arbitrators will be appointed from a list of specialized arbitrators to be created and maintained by a neutral appointing committee.128 Hearings may be held in person, or via telecommunication and parties may call experts to provide evidence during the hearings.129

With regard to the award, the purpose of the arbitration procedure is not to award damages or pecuniary compensation.130 Rather, the award will determine whether the adverse decision was well-founded and in accordance with the relevant version of the GSRs.131 If it is determined that the adverse decision was not well-founded or it violated the relevant GSRs, the arbitration tribunal may issue an alternative decision or provide for an alternative action.132

**Conclusion**

The right to due process is fundamental to democratic ideals and governance systems. As the compliance markets and, in particular, the CDM, evolve, they will likely seek to incorporate mechanisms to protect individual procedural rights. Those best positioned to play the part of role model are CAR, ACR, VCS, and GS, having all achieved a level of market credibility measured by the NSMD framework. However, the appeals procedures provided for by these four standards vary widely. The voluntary carbon markets, and the offset certification standards that operate within them, are gaining credibility and can set the tone for the compliance markets.

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**Endnotes: Due Process Rights in the Carbon Markets**


2 Id. (citing Benjamin Cashore, _Legitimacy and the Privatization of Environmental Governance: How Non-State Market Driven (NSMD) Governance Systems Gain Rule-Making Authority_, 14 GOVERNANCE 502 (2002)).

3 The Kyoto Protocol, which established the most prominent international carbon market, is an international agreement linked to the United Nations Framework Convention on Climate Change that was adopted on December 11, 1997 and later entered into force on February 16, 2005. For the purpose of determining national commitments, the 185 nations that have ratified the Protocol are categorized as an Annex I country, an Annex II country or a developing country. To aid nations in attaining their emissions targets, the Protocol created two offset mechanisms: the Clean Development Mechanism (“CDM”), and Joint Implementation (“JI”). See generally Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, 32 Stat. 97, 34 U.N.T.S. 243 [hereinafter Kyoto Protocol].


5 See generally, Kyoto Protocol, supra note 3.


9 See generally Richard Bayon et al., _VOLUNTARY CARBON MARKETS: AN INTERNATIONAL BUSINESS GUIDE TO WHAT THEY ARE AND HOW THEY WORK_ 22-23 (2007).

10 Id. at 22.

11 Once a carbon credit is retired, it cannot be re-sold. Companies, organizations, governments, or individuals looking to reduce their carbon footprint must retire a corresponding number of carbon credits. See id. at 31.

12 See Rolf H. Weber & Aline Darbellay, _Regulation and Financial Intermediation in the Kyoto Protocol’s Clean Development Mechanism_, 22 GEO. INT’L L. REV. 271, 279-80 (2010) (explaining that “[o]ne CER represents one ton of carbon dioxide equivalent . . . . No tangible certificate is created upon issuance, but an electronic database tracks the output of CER. Carbon units are accounting units that have their own unique serial numbers and are tracked and recorded through the CDM registry or any subsequent registry. CER are transferable and can be traded in the carbon market.”).

13 Id. at 278-79; Kyoto Protocol, supra note 3, at art. 12, ¶ 1.


15 Id. at 14-15.

16 Weber & Darbellay, supra note 12, at 278 (explaining that DOEs are designated by the CDM Executive Board); _UNFCCC Report, supra note 14_, ¶ 27(e), 35-40; Kyoto Protocol, supra note 3, at art. 12, ¶ 5.

17 Weber & Darbellay, supra note 12, at 278; _UNFCCC Report, supra note 14_, ¶ 36,43, Kyoto Protocol _supra note 3_, at art. 12, ¶ 5(c).

18 Weber & Darbellay, supra note 12, at 279; _UNFCCC Report, supra note 14_, ¶ 44-47; Kyoto Protocol _supra note 3_, at art. 12, ¶ 5(b).

19 Weber & Darbellay, supra note 12, at 279.

20 Id.

21 Id.
Approximately fifty-six percent of OTC transactions in the voluntary markets ($325.9 million; trades on other voluntary exchanges comprised the remainder. In 2009, an estimated 93.7 million tons of carbon or its equivalent were traded in voluntary market transactions, (moderncms_documents/vcarbon_2010.2.pdf).}

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Endnotes:

22. Id.


27. See KATHERINE HAMILTON ET AL., ECOSYSTEM MARKETPLACE & BLOOMBERG NEW ENERGY FINANCE, STATE OF THE VOLUNTARY CARBON MARKETS, at ii-iii, vi (2010) http://moderncms.ecosystemmarketplace.com/repository/moderncms_documents/vcarbon_2010.2.pdf. In 2009, an estimated 93.7 million tons of carbon or its equivalent were traded in voluntary market transactions, totaling $387.4 million. Trades on the Chicago Climate Exchange (“CCX”) accounted for almost half of the volume, but only thirteen percent of the market share valued at $49.8 million. Over-the-counter (“OTC”) transactions accounted for eighty-four percent of the market share, valued at approximately $325.9 million; trades on other voluntary exchanges comprised the remainder. Approximately fifty-six percent of OTC transactions in the voluntary markets originated in North America.

28. Id. at 57.

29. Id. at viii.

30. About VCS, VERIFIED CARBON STANDARD, http://www.v-c-s.org/about.html (last visited Mar. 8, 2011). The full name of the VCS changed from Voluntary Carbon Standard to Verified Carbon Standard in 2011; therefore reports cited include the former designation while websites include the latter.

31. Id.


33. Id. at 4-5 (stating that “Real” means that the reductions actually occurred, “additional” means that the reductions are beyond a business-as-usual scenario, “conservative” means the assumptions and procedures will not over-estimate a given project’s GHG impact, and “unique” means the reductions are not double counted).


36. Id.


41. Id. at 7.


49. Levin et al., supra note 48, at 777-78; Bernstein, supra note 1, at 104; Benjamin Cashore et al., Revising Theories of Nonstate Market-Driven (NSMD) Governance: Lessons from the Finnish Forest Certification Experience, Global Envtl Pol., Feb. 2007, at 1.

50. See Cashore et al., supra note 49 at 2. Forest certification is a means of identifying and certifying well-maintained forestland with a label, similar to a VER, ERT, CRT, or VCU in the carbon market, that denotes the land as compliant with a certain standard of stewardship thereby allowing products from certified forest to demand a price premium in the relevant market. See Eric Hansen, Michael P. Washburn & Jim Finley, Understanding Forest Certification, SUSTAINABLE FORESTS P’SHIP, http://sfp.cas.psu.edu/pdfs/PS%20underforestcert.pdf (last visited Feb. 27, 2011).

51. See, e.g., Levin et al., supra note 48, at 778.

52. See, e.g., Bernstein, supra note 1, at 106-07; Cashore et al., supra note 49, at 8.

53. Cashore et al., supra note 49, at 8 (emphasis omitted).

54. Id. (arguing that the first prong of the test is the most important); Bernstein, supra note 1, at 107 (stating that NSMDs are distinguishable from public-private partnerships).

55. See, e.g., Bernstein, supra note 1, at 107-09; Cashore et al., supra note 49, at 8; Levin et al., supra note 48, at 778.

56. Cashore et al., supra note 49, at 8.

57. Id.

58. See, e.g., Levin et al., supra note 48, at 778; Bernstein, supra note 1, at 109-10.

59. See Bernstein, supra note 1, at 109.

60. See, e.g., id. at 110; Levin et al., supra note 48 at 778.

61. Bernstein, supra note 1, at 110.

62. See, e.g., id. at 110-11; Cashore et al., supra note 49, at 9; Levin et al., supra note 48, at 778.

63. See Bernstein, supra note 1, at 110.

64. Id.


66. Id. at 102-03.

67. Id. at 103.

68. Id.

69. Id.

70. See Levin et al., supra note 48, at 781-82. For a NSMD system to obtain “political legitimacy”—defined as “acceptance and [justification] of [a] shared rule by [the] community as appropriate and justified”—the NSMD system must complete a three-step process. First, the NSMD system must be “initiated.” This can be achieved through adoption of the NSMD system by firms that already meet the standard’s criteria. Second, the market must build widespread support for the NSMD system. This can be done through the relaxation of the standard’s criteria, or, if the standard refuses to lower its barriers, competing standards will develop. The competing standards may converge at a later stage depending on market forces. Finally, the NSMD system will achieve “political legitimacy” once business, social, and environmental interests look to the NSMD system “as a legitimate arena[ in which to mediate disputes and address policy problems.” Id. (quoting Steven Bernstein & Benjamin Cashore, Can Non-State Global Governance Be Legitimate? An Analytical Framework, 1 REG. & GOVERNANCE 347, 361 (2007)). It is beyond the scope of this Article to determine the political legitimacy of each certification standard. However, without a review process for aggrieved constituents, a certification cannot reasonably expect to be viewed as a forum “in which to mediate disputes.”


72. Id. at 5. The VCS 2007.1 project cycle consists of six steps: (1) the project proponent submits all project documents to the auditor, (2) the verifier assesses the project against VCS 2007.1 and writes a validation and, later, a verification process.
report; (3) the VCS Registry Operator receives the project documents; (4) the VCS Registry Operator reviews the project documents and submits them to the VCS Project Database; (5) the VCS Project Database reviews the documents and checks for issues such as double-counting; (6) the VCS Registry Operator requests the registration fee and, once those are paid, issues VCU to the project proponent.

73 See Hamilton et al., supra note 27, at 68.
75 VCS Program Guidelines, supra note 32, at 7.
76 See Valerie Volocvici, US Voluntary Market to See Steady Demand: Observers, Point Carbon (Jan. 3, 2011) (stating that, to date, the California Air Resources Board, which will manage California’s cap and trade program, has only endorsed offset protocols from CAR).
77 See Hamilton et al., supra note 27, at 68.
79 Am. Carbon Registry, supra note 40. Under ACR’s rules, a project proponent submits paperwork to ACR for an initial eligibility screening, which it must pass, before the proponent can then seek out an ACR-approved verifier to validate the project as compliant with ACR’s standards and verify the integrity of the GHG reductions involved in the project. ACR permits proponents to submit projects utilizing GHG measurement tools and methodologies of other standards, some of which have been preapproved as compliant with ACR’s rules, while others will require case-by-case approval by an ACR Board. Once ACR accepts the verification report, the project will be registered in ACR’s database and ERTs will be issued as they accrue and in accordance with the sums outlined in the verification report.
80 See Hamilton et al., supra note 27, at 68.
82 The GS project cycle requires that the project proponent host two meetings with the project’s local host community to assess the impacts of the project. An independent auditor must validate the project and the Gold Standard’s independent Technical Advisory Committee (“GS TAC”) reviews the validation report. If there are no issues, then the Gold Standard registers the project. Following registration, a different independent auditor must periodically verify that the claimed emissions reductions are occurring. The GS TAC will review the verification report, and if there are no issues, the Gold Standard will issue VERs to the legal owner of the credits. See The Gold Standard Found., Requirements 49-50 (2009), http://www.cdmgoldstandard.org/fileadmin/editor/files/6_GS_technical_docs/GSv2.1/GSv2.1_Requirements.pdf.
85 Id. at 10.
87 Id. at 111.
88 Id.
89 Id.
91 Id. at 88, 103-05.
92 The International Centre for the Settlement of Investment Disputes is one such example. See generally Int’l Ctr. for the Settlement of Inv. Disputes, http://icsid.worldbank.org/ICSID/; see id. at 103-05 (discussing the advantages and disadvantages of private arbitration under the Kyoto Protocol).
93 Id.
94 Id.
95 Id. (recommending an internal dispute mechanism as the most appropriate forum for resolving certain disputes under the Kyoto Protocol).
96 Streek & Lin, supra note 65, at 410.
97 See Kossov & Ambross, supra note 25, at 48 (summarizing issues facing the CDM market).
98 See id. at 410-11.
99 See id. at 410-11.
100 See Procedures for Appeals, supra note 4.
101 VCS Program Guidelines, supra note 32, at 10; Voluntary Carbon Standard, supra note 71, at 10, 22. Also explaining that appeals for “micro-projects” will be governed by the International Standards Organisation.
103 VCS Program Guidelines, supra note 32, at 10.
104 Id. at 7, 10. The VCS Association is a nonprofit organization under Swiss law that legally represents the VCS Secretariat and Board. The VCS Association is managed by the VCS Program, which has its own Secretariat that is “responsible [sic] for responding to stakeholder queries, liaising with the media, entering into contracts, managing relationships with VCS Registry operators and accreditation bodies . . . .”
105 Id. at 10.
106 Id.
107 See recent case law on international criminal law that addresses the use of arbitration under the Kyoto Protocol).
108 See generally The International Centre for the Settlement of Investment Disputes is one such example. See generally Int’l Ctr. for the Settlement of Inv. Disputes, http://icsid.worldbank.org/ICSID/
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112 The GS project cycle requires that the project proponent host two meetings with the project’s local host community to assess the impacts of the project. An independent auditor must validate the project and the Gold Standard’s independent Technical Advisory Committee (“GS TAC”) reviews the validation report. If there are no issues, then the Gold Standard registers the project. Following registration, a different independent auditor must periodically verify that the claimed emissions reductions are occurring. The GS TAC will review the verification report, and if there are no issues, the Gold Standard will issue VERs to the legal owner of the credits. See The Gold Standard Found., Requirements 49-50 (2009), http://www.cdmgoldstandard.org/fileadmin/editor/files/6_GS_technical_docs/GSv2.1/GSv2.1_Requirements.pdf.
115 Id. at 10.
116 Id.
117 Id.
118 American Carbon Registry, supra note 40, at 6.
120 Id.
123 Press Release, supra note 118.
125 Id. at 28-29.
126 Id.; John E. Noyes, Association of American Law Schools Panel on the International Criminal Court, 36 Am. Crim. L. Rev. 223, 225 (1999). The Permanent Court of Arbitration (PCA) was established during the 1899 Hague Convention on the Pacific Settlement of International Disputes as “an arrangement involving a list of qualified arbitrators, an administrative structure, and rules of procedure.” See History, Permanent Court of Arbitration, http://www.pca-cpi.org/showpage.asp?page_id=1044 (last visited Dec. 21, 2010). The 1899 Convention was revised in 1907 at the Second Hague Peace Conference. Though considered a precursor to other International Courts such as the Permanent Court of International Justice and the International Court of Justice, the PCA has evolved into a “multi-faceted arbitral institution . . . situated at the juncture between public and private international law . . . . Today the PCA provides services for the resolution of disputes involving various combinations of states, state entities, intergovernmental organizations, and private parties.”
127 See The Gold Standard Found., supra note 121 at 8-12.
128 Id.
129 Id.
130 Id.
131 Id.
132 Id.