

The Essential and Growing Role of Legal Education in Achieving Sustainability

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I. Introduction

In June, 1963, in Bonn, at the height of the Cold War, President John F. Kennedy warned against standing on the sidelines during difficult times: “Dante once said that the hottest places in hell are reserved for those who in a period of moral crisis maintain their neutrality.”¹ The times in which we live are also difficult—even perilous. Our ability to maintain current levels of

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1. Public Papers of the Presidents, John F. Kennedy, Jan. 1 to Nov. 22, 1963, 503 (1964) (remarks in Bonn at the Signing of a Charter Establishing the German Peace Corps, June 24, 1963). In Dante’s *Inferno*, from which the statement is taken, they are actually just outside the real Hell. The guide explains:
 - This wretched measure is kept by the miserable souls who lived without infamy and without praise.
 - They are mixed with that cowardly chorus of angels who were not rebels yet were not faithful to God, but were for themselves.
 - The heavens reject them so as not to be less beautiful, nor does deep Hell receive them, for the wicked would have some glory from them.
 The *Divine Comedy of Dante Alighieri: Inferno*, Canto III, 34-42 (Robert M. Durling ed. & trans., Oxford Univ. Press 1996). The guide also describes them as “the grieving peoples who have lost the good of the intellect.” *Id.* at 16-18.

freedom, opportunity, and quality of life for ourselves and future generations is being challenged by climate change, declining biodiversity, and our large and growing ecological footprint.²

This Article is about the role of law, and particularly legal education, in addressing the challenge of sustainable development. In 1992, at the U.N. Conference on Environment and Development, or Earth Summit, the world's leaders endorsed an ambitious plan for achieving sustainability.³ Sustainable development is among the most important ideas to come out of the 20th century, for it would change the definition of human progress. We have historically justified environmental degradation as the necessary price of progress, which we understand to mean improvements in security, human well-being, and economic development. Improvements in these areas, we have said, are good because they increase human freedom, opportunity, and quality of life. But it is increasingly clear that environmental degradation puts all of these at risk or weakens our ability to achieve them. By contrast, environmental protection and restoration can make us more secure, increase our well-being, and foster economic development. Thus, sustainable development would have us protect and restore the environment at the same time as we achieve improvements in these other areas.⁴

Sustainable development is ecologically sustainable human development; it is “socially responsible economic development” that protects “the resource base and the environment for the benefit of future generations.”⁵ In a world with a growing human population, a growing economy, growing environmental degradation, and nearly two billion people who live on less than one dollar a day, sustainability is a necessity, not a luxury. Still, the journey to a truly sustainable society could take at least two generations.⁶

Unfortunately, neither sustainable development nor the on-ramp to a sustainable society has a dependable legal foundation. Environmental and natural resources law are essential foundations for sustainable development,

2. See, e.g., Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis* (2007); United Nations Environment Programme, *Global Environmental Outlook 4: Environment for Development 3-38* (2007), available at http://www.unep.org/geo/geo4/report/GEO-4_Report_Full_en.pdf; Millennium Ecosystem Assessment, *Ecosystems and Human Well-Being: Synthesis* (Island Press 2005), available at <http://www.maweb.org/documents/document.356.aspx.pdf> (science-based assessments).
3. U.N. Conference on Environment and Development, Agenda 21, U.N. Doc. A/CONF.151.26 (1992), available at <http://www.un.org/esa/dsd/agenda21/> [hereinafter *Agenda 21*]; U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/5/Rev.1, 31 I.L.M. 874 (1992), available at <http://www.unep.org/Documents/multilingual/Default.asp?DocumentID=78&ArticleID=1163>.
4. John C. Dernbach, *Targets, Timetables and Effective Implementing Mechanisms: Necessary Building Blocks for Sustainable Development*, 27 *Wm. & Mary Envtl. L. & Pol'y Rev.* 79, 84-87 (2002).
5. *Agenda 21*, *supra* note 3, ¶8.7.
6. Board on Sustainable Development, National Research Council, *Our Common Journey: A Transition Toward Sustainability 6-7* (Nat'l Academy Press 1999).

and are reasonably well developed in the United States and many other countries. But these laws, even with appropriate modifications and more committed implementation, do not address the gamut of sustainability challenges. “A specter is haunting American environmentalism—the specter of failure,” the former dean of the Yale School of Forestry and Environmental Studies lamented recently. Despite our environmental laws, “the environment has continued to go downhill, to the point that the prospect of a ruined planet is now very real.”⁷ Environmental laws do not directly address consumption of energy, water, resources, and land; with 5 percent of the world’s population, the United States “leads the world in the overall use of natural resources and, in most cases, in per capita use of resources.”⁸ Nor do they directly address a great many laws that have historically been used to foster economic development—laws that have the effect of encouraging, supporting, and even rewarding environmental degradation.⁹ In spite of the many environmental and natural resource protection laws that have been adopted and implemented in recent decades, many of these anti-environmental laws continue to exist.¹⁰ Put differently, there has been an insufficient effort to turn the nation’s economic development laws toward green development and green jobs.¹¹ Finally, these laws do not provide an adequate framework for addressing emerging threats such as climate change.¹²

New laws and institutions—and lawyers to design, draft, implement, and manage them—are essential for sustainability. The magnitude of this need

7. James Gustave Speth, *The Case for a New American Environmentalism: Incremental Change Led by Lawyers, Scientists, and Economists Will Not Save Our Environment*, 39 *Envtl. L. Rep.* 10,066 (*Envtl. L. Inst.* 2009).
8. *Progress Toward Sustainability: A Report Card*, in *Agenda for a Sustainable America* 15, 18 (John C. Dernbach ed., *Envtl. L. Inst.* 2009) [hereinafter *Progress Toward Sustainability: A Report Card*].
9. *See generally* Richard N.L. Andrews, *Managing the Environment, Managing Ourselves: A History of American Environmental Policy* (2d ed. Yale Univ. Press 2006) (surveying U.S. history from the perspective of the many different kinds of laws that have encouraged economic development and the environmental impacts of those laws).
10. Fossil fuel subsidies, for example, encourage growth in greenhouse gas emissions by promoting the use of coal, oil, and other fossil fuels and by making it harder for energy efficiency and renewable energy to compete in the marketplace. Doug Koplow & John Dernbach, *Federal Fossil Fuel Subsidies and Greenhouse Gas Emissions: A Case Study of Increasing Transparency for Fiscal Policy*, 26 *Ann. Rev. Energy & Env't.* 361 (2001).
11. Parts of the American Reinvestment and Recovery Act, Pub. L. No. 111-15, 123 Stat. 115 (2009), represent steps in the right direction.
12. Under the Supreme Court’s decision in *Massachusetts v. Environmental Protection Agency*, 549 U.S. 497, 528-29 (2007), greenhouse gases are pollutants under the Clean Air Act, 42 U.S.C. §§ 7401-7671q. While EPA has begun to use the Clean Air Act to regulate greenhouse gas emissions from motor vehicles as well as stationary sources such as power plants, major climate change legislation is needed to modify the Clean Air Act and other statutes to make them work effectively to address climate change. *See, e.g.*, H.R. 2998, 111th Cong. (June 23, 2009) (climate change bill adopted by House of Representatives).

is indicated by a recently published assessment of sustainable development efforts in the United States and what should be done over the next decade. Its first three overall recommendations are:

1. The United States should systematically reduce its ecological footprint.
2. The United States government must adopt, as soon as possible, greenhouse gas emission reduction programs that will reduce U.S. emissions to our fair share of safe global emissions.
3. The United States should create more employment opportunities in environmental protection and restoration, and make it easier for unskilled and low-income persons to enter and remain in the workforce.¹³

While law schools have begun to address sustainable development, they have not done so in any organized or systematic way. This Article suggests that law schools need to play a leading role in the national and global effort to achieve sustainability.¹⁴

Part II describes two sets of drivers for sustainability efforts in law schools—inside and outside the legal profession, and the growing effect of these drivers. Part III describes types of sustainability practices that are currently being undertaken by law schools. As Part III suggests, the major issues driving this trend toward sustainability activities are energy and climate change.¹⁵ For better and for worse, climate change in particular has become the public face of unsustainable development. For better: because climate change makes concrete the need for sustainable development, an issue that is often too abstract for people to understand. For worse: because sustainable development is required to address other issues, like biodiversity, resource consumption, and land use, which may be shortchanged if the predominant focus is on climate change.

Part III also raises—and tentatively suggests some partial answers to—a set of normative questions about precisely what law schools should be doing. The direction that law schools are already moving provides a general answer to those questions. It is time for a more open and robust discussion among law schools about the specific steps that legal education needs to take to equip our students and our society for the sustainability challenges and opportunities that the future will bring.

13. The Contributing Authors, Agenda for a Sustainable America, in *Agenda for a Sustainable America*, *supra* note 8, at 27.
14. While this Article focuses primarily on U.S. law schools, many of its conclusions could also be applied to law schools outside the United States. In fact, many examples of very good law school efforts on sustainability come from other countries. Still, I am unaware of any studies of law schools' sustainability efforts outside the United States that are comparable to this one.
15. Progress Toward Sustainability: A Report Card, *supra* note 8, at 14. See also Ann Rappaport, Campus Greening: Behind the Headlines, *Environment*, Jan./Feb. 2008, at 6, 8.

II. Drivers for Sustainability in Law Schools

A. Drivers From Outside the Legal Profession

At least four sets of drivers are pushing for sustainability from outside the legal profession: clients, universities and colleges, nongovernmental organizations, and government.

Clients—especially business and industry clients, as well as nongovernmental and governmental clients—have become increasingly engaged in sustainability, with growing sophistication and more intensive commitment, and often in response to (or to advocate, prepare, or anticipate) government regulation. Corporate sustainability efforts have been growing in scope and intensity over the past few years, as companies such as General Electric, Wal-Mart, and Coca-Cola have made aggressive efforts to reduce the environmental impacts of their products, supply chains, and operations.¹⁶ The number and seriousness of recent sustainability efforts by businesses and corporations is such that we may have recently reached a tipping point toward such practices.¹⁷

In translating the broad objectives of sustainability into specific practices, businesses are guided by more than two dozen sustainability-related codes of organizational behavior, including the CERES (Coalition for Environmentally Responsible Economics) Principles and the International Chamber of Commerce's Charter for Sustainable Development.¹⁸ These companies also tend to employ one or more sustainability-related management systems.¹⁹ Such systems typically require a company to identify and describe its environmental impacts, set priorities and goals for moving toward sustainability, put in place an appropriate management and implementation system, assess progress, and achieve continuous improvement.²⁰

Still another development is the creation of standards or certification systems for specific activities, such as green building. Under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program, certification of green buildings is based on demonstrated performance

16. Business and industry are among six sectors that have made the most progress toward sustainability in the United States since 2002, out of twenty-eight sectors studied. Progress Toward Sustainability: A Report Card, *supra* note 8, at 16-17. See also Daniel C. Esty & Andrew S. Winston, *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage* (Yale Univ. Press 2006).

17. Ira Feldman, *Business and Industry: Transitioning to Sustainability*, in *Agenda for a Sustainable America*, *supra* note 8, at 71, 71-72.

18. William R. Blackburn, *The Sustainability Handbook* 647-85 (Envtl. L. Inst. 2007).

19. *Id.* at 687-702 (summarizing each of more than two dozen such systems and providing a link for each).

20. *Id.* at 699. See also Brian Nattrass & Mary Altomare, *The Natural Step for Business: Wealth, Ecology and the Evolutionary Corporation* (New Soc'y Pub. 1999).

in “energy savings, water efficiency, carbon dioxide emissions reduction, improved indoor environmental quality, and stewardship of resources.”²¹

Business motivations include, but are not limited to, avoidance of existing and likely future government regulation. A major driving force, of course, is the reality of widespread state efforts to address climate change and the prospect of future national climate change legislation. Yet businesses are also motivated by a desire to gain competitive advantage by seizing market opportunities and reducing costs in a more resource-constrained world. They are also responding to demands from customers, shareholders, and the communities in which they operate.²²

As clients move in this direction, they increasingly expect their lawyers to have the knowledge and skills to advise and support them. Law firms that have positioned themselves to take advantage of the growing development of renewable energy, for example, are being rewarded in the market.²³ A growing number of attorneys are becoming accredited professionals in the LEED program—a qualification that enables them to provide better legal assistance to clients.²⁴ Such knowledge and skills are also important for lawyers representing environmental groups; community and citizen organizations; and local, state, tribal, and national governments. This is particularly true because legal issues, disputes, and problems are increasingly framed by sustainability concepts and objectives. For law offices of all kinds, it is more efficient and cost-effective to hire lawyers who received some of that training in law school than to do all of that training themselves.

21. U.S. Green Building Council, Intro—What LEED Is, *available at* <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988>.
22. Feldman, *supra* note 17, at 72–74. *See also* Esty & Winston, *supra* note 16; The New Corporate Accountability: Corporate Social Responsibility and the Law (Doreen McBarnet et al., eds., Cambridge Univ. Press 2007).
23. Peter Page, Silver Linings: Renewable Energy Fuels Finance Boom, *Nat'l L. J.*, Dec. 1, 2008, at 1.
24. Harris Meyer, “LEED Lawyers” Help Projects Move Forward, *Puget Sound Business J.*, Nov. 7, 2008, *available at* <http://www.bizjournals.com/seattle/stories/2008/11/10/focus2.html>; Jeff Jeffrey, Now Lawyers Are LEED Accredited, *Blog of Legal Times*, July 30, 2008, *available at* <http://legaltimes.typepad.com/blt/2008/07/now-lawyers-are.html>.

Colleges and universities are another driver for sustainability in law schools, in no small part because of rapidly growing activity at the college and university level.²⁵ To summarize:

Colleges and universities across the United States are increasingly practicing sustainability across the entire range of their activities. Despite the continuing drive to specialize within traditional academic disciplines, courses that incorporate sustainability concepts are being developed in a variety of disciplines. Sustainability-oriented research is increasingly funded in the sciences, and initiatives are also under way to bring the social sciences and humanities into the research dimension. Initiatives to make campus operations more sustainable are now standard practice, and some universities and colleges are actively promoting sustainable development in their surrounding communities and beyond.²⁶

Behind the trend lines is something more fundamental: Sustainability is increasingly seen as a central part of higher education:

Fostering a more sustainable world is arguably the most logical outcome of the higher education endeavor. Nearly every college and university mission statement holds the institution to a purpose higher than simply the creation and dissemination of knowledge. Higher education consistently aspires to instill in graduates such qualities as good citizenship, moral integrity, leadership, critical thinking, and care for the environment. The work of building a sustainable world requires precisely these qualities and more. Because colleges and universities are uniquely equipped to help achieve sustainability through innovation in teaching, research, and institutional practice, it would seem incumbent upon them to rise to this challenge.²⁷

These trends in program development and thinking in higher education are influencing law schools for several reasons. Most obviously, the overwhelming majority of law schools are operated by universities.²⁸ Thus, university-wide sustainable development programs or commitments also apply to their schools of law. Law faculty at George Washington and Syracuse, for example, are members of university-wide sustainability task forces.²⁹

25. In addition to business and industry, colleges and universities are among six sectors that have made the most progress toward U.S. sustainability since 2002. Progress Toward Sustainability: A Report Card, *supra* note 8, at 16-17.

26. *Id.* at 17-18. For a sense of the wide range of activities, see also American Association for the Advancement of Sustainability in Higher Education, available at <http://www.aashe.org/>.

27. Wynn Calder & Julian Dautremont-Smith, Higher Education: More and More Laboratories for Inventing a Sustainable Future, in *Agenda for a Sustainable America*, *supra* note 8, at 93, 93.

28. The American Association of Law Schools, Member and Fee-Paid Schools, available at http://www.aals.org/about_memberschools.php.

29. The faculty are Lee Paddock (George Washington) and David Driesen (Syracuse).

Many universities are making public sustainability commitments that have consequences for how the entire university is supposed to be operated, including their law schools. Perhaps the most prominent of these is the American College and University Presidents' Climate Commitment (ACUPCC).³⁰ The statement notes that "colleges and universities that exert leadership in addressing climate change will stabilize and reduce their long-term energy costs, attract excellent students and faculty, attract new sources of funding, and increase the support of alumni and local communities."³¹ It commits institutions to "develop an institutional action plan for becoming climate neutral," based on a comprehensive assessment of greenhouse gas emissions at the institution.³² While this plan is being developed, institutions are to commit to taking at least two "tangible actions to reduce greenhouse gases" from a list specified in the commitment.³³ More than 600 college and university presidents have signed this commitment.³⁴ The universities making this commitment include at least seventy law schools, which is about one-third of the nation's 198 law schools.³⁵

The existence of a significant movement toward sustainability in higher education necessarily affects all higher education institutions, including law schools. This is true whether or not they are part of a university, and whether or not their university has a sustainability policy. Sustainability efforts at independent law schools like Vermont provide ample evidence.

30. American College & University Presidents' Climate Commitment, *available at* <http://www.presidentsclimatecommitment.org/html/commitment.php>.

31. *Id.*

32. *Id.* The plan is to include "a target date for achieving climate neutrality as soon as possible," interim targets, "[a]ctions to make climate neutrality and sustainability a part of the curriculum and other educational experience for all students," and mechanisms for tracking progress. *Id.*

33. *Id.* These include establishing "a policy that all new campus construction will be built to at least the U.S. Green Building Council's LEED Silver standard or equivalent" and adopting "an energy-efficient appliance purchasing policy requiring purchase of ENERGY STAR certified products in all areas for which such ratings exist." *Id.*

34. American College & University Presidents' Climate Commitment, Signatories of the ACUPCC, *available at* <http://www.presidentsclimatecommitment.org/html/signatories.php>.

35. This number was derived primarily by comparing the list of law schools that are members of the American Association of Law Schools, *supra* note 28, with the list of institutions that have signed the commitment, *supra* note 34. The schools include: American, Appalachian, Arizona State, Arizona, Arkansas, Baltimore, California at Berkeley, California at Davis, California at Los Angeles, Case Western Reserve, Charleston, Cincinnati, Colorado, Connecticut, Cornell, Creighton, Denver, Drake, Duke, Florida, Florida International, George Washington, George Mason, Gonzaga, Houston, Idaho, Illinois, Lewis & Clark, Louisville, Loyola, Maine, Maryland, Memphis, Miami, Minnesota, Mississippi, Missouri, Missouri-Kansas City, Montana, Nevada, New Hampshire, New Mexico, New York University, Northern Kentucky, North Carolina, North Dakota, Northeastern, Ohio State, Oklahoma, Oregon, Pennsylvania, Richmond, Roger Williams, Santa Clara, Seattle, South Carolina, South Dakota, Stetson, Syracuse, Temple, Tennessee, Toledo, Tulane, Utah, Villanova, Washington & Lee, University of Washington, Willamette, Wyoming, and Yeshiva.

Nongovernmental organizations support and encourage sustainability in law schools by advocating laws and policies—through litigation, legislation, and other means—that would foster sustainability. They also provide resources on best practices, by rating college and university sustainability efforts, by facilitating information sharing, and by improving the ability of law schools to assess their progress.³⁶ Examples include the American College and University Presidents' Climate Commitment, the sustainability and climate change policies adopted by the American Bar Association as well as state and local bar associations,³⁷ and the sustainability rating systems for colleges and universities.³⁸ Finally, local, state, and national governments support sustainability efforts in law schools to the extent that they adopt laws requiring or encouraging sustainability. Government can also be an important stakeholder for sustainability efforts at law schools. In turn, many of the sustainability and climate change centers at law schools engage government in a variety of activities to influence the development and implementation of laws, including research, face-to-face dialogues with policy makers, symposia, and speaking engagements.³⁹

B. Drivers Within the Legal Profession

At least three drivers for sustainability in legal education come from within the legal profession—the American Bar Association, as well as several state and local bar associations; law firms and other law organizations; and current and prospective law students.

The American Bar Association (ABA) has adopted significant resolutions advancing sustainability within the legal profession.⁴⁰ In August 2003, the ABA House of Delegates adopted a resolution that endorses sustainable development and urges “businesses, nongovernmental organizations, and other entities” to adopt and implement their own sustainability programs.⁴¹ In so doing, the resolution implicitly includes not only law firms and other law organizations, but also law schools.

As an initial effort to provide specific tools for law firms and other law organizations interested in getting started on the journey to sustainability, the ABA, in partnership with the U.S. Environmental Protection Agency (EPA),

36. Calder & Dautremont-Smith, *supra* note 27, at 104.

37. *See infra* section II.B.

38. *See infra* notes 63–65 and accompanying text.

39. *See infra* section III.B.

40. Michael J. Nasi, Greening the Bar Through Sustainability Initiatives, 72 *Tex. B.J.* 262 (2009).

41. American Bar Association, Policy Positions Adopted by ABA House of Delegates: Sustainable Development (2003), available at <http://www.abanet.org/publicserv/environmental/sustainabledevelopment.shtml>.

has developed the ABA-EPA Law Office Climate Challenge.⁴² A law office can enroll in the ABA-EPA Law Office Climate Challenge by using less paper and purchasing recycled paper, purchasing electricity from renewable sources, or adopting an energy plan to reduce electricity use by at least 10 percent.⁴³ More than 200 law organizations, including at least six law schools, are now enrolled in the Climate Challenge.⁴⁴

The ABA Section on Environment, Energy, and Resources (SEER) has also developed a broader tool, a Model Sustainability Policy and Implementation Guidelines for Law Organizations.⁴⁵ By adopting this policy, a law organization commits to the triple bottom line of economic success (“the wise use of financial resources”), social responsibility (“respect for people”), and environmental responsibility (“respect for life; the wise management and use of natural resources”).⁴⁶ The policy and guidelines are being used by more than a dozen large and small law firms (but no law schools yet).⁴⁷

Some state bar associations and other groups of lawyers are also developing sustainability policies.⁴⁸ Under the Massachusetts Bar Association’s Eco-Challenge, law offices agree to implement one or both of the following sets of environmental practices—green guidelines for law office management,⁴⁹ and green guidelines for landscape management.⁵⁰ In September 2008, the State Bar of California adopted a voluntary sustainability policy for law offices comprised of an “eco-pledge” and a set of guidelines for implementing it.⁵¹

42. American Bar Association Section of Environment, Energy, and Resources, The ABA-EPA Law Office Climate Challenge, *available at* <http://www.abanet.org/environ/climatechallenge/overview.shtml>. The tool was endorsed by the ABA House of Delegates in February 2009. American Bar Association House of Delegates, Resolution 103 (2009), *available at* http://www.abanet.org/leadership/2009/midyear/daily_journal/Adopted103.doc.

43. ABA-EPA Law Office Climate Challenge, *supra* note 42.

44. *Id.*

45. American Bar Association Section of Environment, Energy, and Resources, Model Law Firm Sustainability Policy Project, *available at* <http://www.abanet.org/environ/committees/climatechange/ModelLaw/about.shtml>.

46. American Bar Association Section of Environment, Energy, and Resources, ABA Model Sustainability Policy and Implementation Guidelines for Law Organizations (2009), *available at* <http://www.abanet.org/environ/committees/climatechange/ModelLaw/ModelSustainabilityPolicy.pdf>.

47. American Bar Association Section of Environment, Energy, and Resources, Model Law Firm Sustainability Policy Project, *available at* <http://www.abanet.org/environ/committees/climatechange/ModelLaw/PilotFirms.shtml>.

48. Dan Kittay, Bars Examine their Resource and Technology Use, 32 B. Leader 28 (2008).

49. Massachusetts Bar Association, Green Guidelines (law office management), *available at* <http://www.massbar.org/media/252221/greenguidelines0108.pdf>.

50. Massachusetts Bar Association, Green Guidelines—Landscape Management, *available at* http://www.massbar.org/media/497317/eco_land-gg.pdf.

51. State Bar of California, Voluntary State Bar of California Lawyers Eco-Pledge and Voluntary Law Office Sustainability Policy (2008), *available at* <http://www.calbar.ca.gov/LinkClick>.

Oregon Lawyers for a Sustainable Future (OLSF) has published its own model sustainability policy for law offices, which is directed at reducing their environmental impact.⁵² The policy focuses on waste reduction and recycling, energy use, travel, commuting, and carbon credits.⁵³

More and more law firms and other organizations of practicing attorneys are adopting and implementing policies concerning sustainable development and climate change.⁵⁴ As already noted, many firms have enrolled in the ABA-EPA Climate Challenge, adopted a policy similar to the ABA Model Sustainability Policy, enrolled in the MBA Law Office Eco-Challenge, or adopted or followed other guidelines. Others are acting more or less independently of their relevant bar associations.

The primary sustainability focus of the leading firms and organizations now is on greening their operations.⁵⁵ Basic environmental sustainability objectives include using less paper, reducing electricity consumption, reducing energy use associated with travel, and generating less waste.⁵⁶ Some firms extend their policies to include social sustainability—including employee health, workforce diversity, and charitable contributions for social programs in the

aspx?fileticket=0XNUX4LH330%3D&tabid=233. See also Pennsylvania Bar Association, Pennsylvania Lawyers United for Sustainability (PLUS) Program, available at <http://www.pabar.org/public/sections/envco/plusprogram.asp>.

52. Oregon Lawyers for a Sustainable Future, Model Law Office Sustainability Policy (2006), available at <http://earthleaders.org/olsf/LSF%20model%20sustainability%20policy.pdf>.

53. *Id.*

54. See, e.g., Deborah L. Cohen & Julie Kay, Where the Work Is: Lawyers Recommend These Practice Areas in Recessionary Times, *Am. Bar Ass'n J.*, Aug. 1, 2009, http://www.abajournal.com/magazine/where_the_work_is/ (“The commitment of the [O]bama administration to the development of renewable, efficient sources of energy brings a wave of opportunity to lawyers practicing energy and environmental law.”); John Council, ABA Recognizes Gardere as First Texas Firm in Climate Change Program, *Texas Lawyer*, Feb. 8, 2008 (referring to the firm Gardere Wynne Sewell); Sheri Qualters, Bar Associations Encourage Environmentally-Sustainable Law Offices, *Nat'l Law J.*, Sept. 17, 2007. In addition, publications for lawyers are also featuring articles on how to make a greener law office, including specific issues such as the landlord's control over energy savings decisions of benefit to the law office that is a tenant in the building. See, e.g., Evelyne Michaut & Rob Watson, The Greener(er) Law Practice, *Trial*, Apr. 2008, at 38; David M. Gilson, Green Building Movement: Major Law Firm Office Tenants (Can Be) New Drivers in Achieving Green Building Objectives, *DC Bar*, Oct. 2008, available at http://www.dcbar.org/for_lawyers/resources/publications/washington_lawyer/october_2008/green_building.cfm. See also American Bar Association Standing Committee on Environmental Law, The Sustainable Law Office, available at http://www.abanet.org/publicserv/environmental/sustainable_law_office.shtml (advice and links to resources).

55. Rachel Loper & Robert Loper, How Green Is My Law Firm? 3 (2008), available at http://www.bdlaw.com/assets/attachments/How_Green_is_My_Law_Firm.pdf.

56. *Id.* at 9-13. The policies of many firms are limited to environmental sustainability. See, e.g., Nixon Peabody sustainability commitment, in *id.* at 16-17; Stoel Rives LLP sustainability policy, in *id.* at 18.

community.⁵⁷ Firms and other law organizations that engage in these and other practices are often motivated in part by a sense of social responsibility due to the enormous challenges of climate change and sustainability.⁵⁸ But there are also business development reasons; clients want attorneys who are conversant in sustainability concepts, sustainability is a marketing opportunity for the firm, and firms want to act in a way that supports their environmental or sustainability practice group.⁵⁹ In addition, sustainability is a powerful way to attract and keep new lawyers.⁶⁰

Beyond greening their internal operations, firms and other law organizations have a growing recognition that sustainability requires lawyers to have the requisite knowledge and skills.⁶¹ As a partner in Nixon Peabody explained, “Green development is on the horizon for all development.... We will get to a point very soon that any real estate lawyer who doesn’t have green development skills will not be able to fully provide the client with all the services they need.”⁶²

Finally, law students and prospective law students appear to show a growing interest in sustainability, although this is hard to measure quantitatively. The growth in sustainability programs at the college and university level provides some of the evidence, in no small part because so many college and university graduates become law students. And the popularity of college and university sustainability programs is evidenced by the existence of at least three recently-created ranking systems for sustainability in higher education. *The Princeton Review* annually publishes Green Ratings of colleges based on environmental sustainability⁶³ and *thedailygreen.com* has published a list of “10 of the greenest colleges in America.”⁶⁴ The National Wildlife Federation has also published a “national report card on sustainability in higher education.”⁶⁵ Many

57. James D. Brusslan, *How Levenfeld Pearlstein LLC Is Adapting and Implementing the ABA Model Policy on Sustainability (2008)*, available at <http://www.abanet.org/environ/committees/climatechange/ModelLaw/suppinfo/ABAKestoneJDBPaper.pdf>.

58. Loper & Loper, *supra* note 55, at 3.

59. *Id.* at 3-5.

60. *Id.* This is not limited to law. “[T]hree-fourths of workforce entrants in the United States regard social responsibility and environmental commitment as important criteria in selecting employers.” Ram Nidumolu, C.K. Prahalad & M.R. Rangaswami, *Why Sustainability Is Now the Key Driver of Innovation*, *Harv. Bus. Rev.*, Sept. 2009, at 57, 64.

61. Loper & Loper, *supra* note 55, at 3.

62. *Id.* at 13.

63. Princeton Review, *Green Colleges*, available at <http://www.princetonreview.com/green.aspx>.

64. Brian Clark Howard, *thedailygreen.com*, 10 of the Greenest Colleges in America, available at http://www.thedailygreen.com/environmental-news/latest/10-greenest-colleges-460708?click=main_sr.

65. National Wildlife Federation, *Campus Environment 2008: A National Report Card on Sustainability in Higher Education (2008)*, available at <http://www.nwf.org/campusEcology/docs/CampusReportFinal.pdf>.

students now entering law schools seem to have a much higher awareness of environmental matters than prior classes, and more are motivated by a desire to do something about it.⁶⁶

C. The Cumulative Effect of All Drivers

These influences on law schools—from inside and outside the legal profession—are mutually reinforcing. Client demand influences the skills and knowledge that lawyers seek and that law schools provide, which in turn can intensify client demand for more sustainability knowledge and skills. Bar association efforts to develop sustainability and climate change policies are enabled by supportive lawyers and law offices, and these policies increase the number of law offices with their own sustainability and climate change efforts. These law offices, in turn, are finding that these policies make them more attractive as a place for law school graduates to work, which puts more pressure on law schools to prepare their students accordingly. And all of these influences are driven by a growing awareness of the need to dramatically reduce our ecological footprint even as we seek economic growth, more job opportunities, higher quality of life, and greater security.

III. Trends Toward Sustainability in Law Schools

Higher education officials from around the world have concluded that a college or university that fully embraces sustainable development is committed across the full range of its basic activities.⁶⁷ These include six core areas: curriculum; research; buildings and operations; community outreach and service; student life; and institutional mission, policy, and planning.⁶⁸ And it is not enough that the college or university itself embraces sustainability; it is also necessary for its external stakeholders to embrace sustainability.⁶⁹

What follows is a thematic overview of what law schools are already doing for sustainability, organized by these categories of activity. It is thematic because it attempts to identify key practices, rather than to comprehensively catalogue each activity at each school.⁷⁰ This is not an overview of current law school practices on environmental law, which are rich and diverse, or an assessment

66. Peter Page, Green by Design, *Nat'l Law J.*, Jan. 14, 2008, available at <http://www.colorado.edu/facilitiesmanagement/about/conservation/documents/Law-GreenbyDesign.pdf>.

67. Wynn Calder & Richard M. Clugston, Higher Education, in *Stumbling Toward Sustainability* 625, 626–31 (John C. Dernbach ed., *Env'tl. L. Inst.* 2002).

68. Calder & Dautremont-Smith, *supra* note 27, at 93–94.

69. *Id.* at 94.

70. It draws from Randall S. Abate, *Directory of Environmental Law Education Opportunities at American Law Schools* (2d ed., Carolina Academic Press 2008), which identifies a number of opportunities that are related to sustainability. In addition, it draws from various brochures and websites that many law schools use concerning their environmental programs. It also relies on responses received to a Fall 2008 inquiry I posted on the environmental law professors listserv. A thematic perspective also means that this list is less likely to become quickly outdated.

of the leading law schools in environmental law,⁷¹ whose achievements are considerable. It is, rather, an attempt to assess practices that extend beyond the boundaries of environmental law toward sustainability, and to identify as examples some of the schools that are doing that work.

A. Curriculum and Teaching

The Carnegie Commission report on legal education emphasizes the importance of training lawyers with the knowledge and skills needed to practice law in new and challenging contexts:

The calling of legal educators is a high one: to prepare future professionals with enough understanding, skill, and judgment to support the vast and complicated system of the law needed to sustain the United States as a free society worthy of its citizens' loyalty; that is, to uphold the vital values of freedom with equity and extend these values into situations as yet unknown but continuous with the best aspirations of our past.⁷²

While the report does not mention sustainability or even the environment, the knowledge and skills needed for sustainability will be a growing part of the future practice of law.

What knowledge and skills will future lawyers need? To begin with, they will need to understand the conceptual framework that sustainability embodies, particularly the integration of environment and development goals, and the ability to craft and apply appropriate legal rules that protect and restore the environment at the same time as they help grow the economy, create jobs, and protect national security.⁷³ That, in turn, will require the ability to work in other disciplines, including not only the natural sciences, engineering, and economics, but also policy analysis and the social sciences (e.g., human behavior, institutional design).⁷⁴ Because sustainable development is an

71. For better and for worse, the most prominent ranking system is U.S. News & World Report, Best Law Schools Specialty Rankings: Environmental Law; Ranked in 2010, available at <http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-law-schools/environmental-law>.

72. William M. Sullivan, Anne Colby, Judith Welch Wegner, Lloyd Bond & Lee S. Shulman, *Educating Lawyers: Preparation for the Profession of Law 202* (Jossey-Bass/Wiley 2007).

73. John C. Dernbach, Achieving Sustainable Development: The Centrality and Multiple Facets of Integrated Decisionmaking, 10 *Ind. J. Global Legal Stud.* 247 (2003). "To ensure that all students achieve basic sustainability literacy," colleges and universities should "create graduation requirements or core courses focused on sustainability." Calder & Dautremont-Smith, *supra* note 27, at 103. This "requirement could take the form of a single required class or a menu of sustainability-focused courses from which students can choose." *Id.*

74. *Cf.* Earth Institute at Columbia University & John D. and Catherine T. MacArthur Foundation, International Commission on Education for Sustainable Development Practice: Final Report (2008), available at <http://www.wfeo.org/documents/download/ICESDP%20Final%20Report%202008.pdf> (finding a lack of comprehensive cross-disciplinary academic programs to train sustainability practitioners, and recommending that universities create Master's in Development Practice programs based on health sciences, natural sciences and engineering, social sciences, and management). Of the nine universities from around the

internationally used framework that is applied in specific contexts, lawyers will need to be able to work across a range of legal systems—not only national, state (or provincial), and local, but also international.

Sustainable development also involves a great many legal fields, including not only environment, natural resources, and energy law, but also property, tax, corporate, international trade, and securities regulation.⁷⁵ It is possible, as the report accompanying the 2003 ABA resolution on sustainable development suggested, that “all law should have sustainable development principles integrated into it.”⁷⁶ It is also possible, given the national and global threats it addresses, that sustainability will evolve into an ethical duty in the practice of law.⁷⁷ Finally, because sustainable development will require the creation or modification of new laws and legal institutions,⁷⁸ it will require particular emphasis on legal skills appropriate to such work, including legislative and contract drafting, multi-party negotiation, and alternative dispute resolution, as well as client counseling and litigation.

Three trends toward sustainability in teaching and curriculum are evident in law schools. These concern courses, textbooks, and programs.

world selected to receive MacArthur Foundation funding to establish such programs, two are in the United States and both have law schools: Emory and Florida. Earth Institute at Columbia University, MacArthur To Support Master's Programs Around The World Offering Professional Training for Future Sustainable Development Leaders (June 30, 2009), <http://www.earth.columbia.edu/articles/view/2505>.

75. Indeed, evidence of progress in the development of sustainable development law is provided by the introduction of environmental protection rules in other fields. *See, e.g.*, Kevin C. Kennedy, International Trade: Sustainability as a Multilateral, Bilateral, and Regional Effort, in *Agenda for a Sustainable America*, *supra* note 8, at 383 (international trade); Jeffrey A. Smith & Matthew A. Morreale, Disclosure Issues, in *Global Climate Change and U.S. Law* (Michael B. Gerrard ed., ABA Sect. of Env't., Energy & Resources 2008) (securities regulation); Judd F. Sneirson, Green is Good: Sustainability, Profitability, and a New Paradigm for Corporate Governance, 94 *Iowa L. Rev.* 987 (2009) (corporate governance); J.B. Ruhl, Common Law Environmental Protection: Making Nuisance Ecological, 58 *Case W. Res. L. Rev.* 753 (2008) (property); Roberta Mann, Another Day Older and Deeper in Debt: How Tax Incentives Encourage Burning Coal and the Consequences for Global Warming, 20 *Pac. McGeorge Global Bus. & Dev. L.J.* 111 (2007) (tax law).
76. American Bar Association House of Delegates Resolution on Sustainable Development 2 (2003), *available at* <http://www.abanet.org/leadership/2003/journal/108.pdf>.
77. By analogy, the Model Code of Ethics developed by the World Federation of Engineering Organizations states: “Professional engineers shall...hold paramount the safety, health and welfare of the public and the protection of both the natural and the built environment in accordance with the Principles of Sustainable Development.” World Federation of Engineering Organizations, *The WFEO Model Code of Ethics* (2001), *available at* http://wfeo.net/au_subrules.aspx.
78. *See, e.g.*, John C. Dernbach, Navigating the U.S. Transition to Sustainability: Matching National Governance Challenges with Appropriate Legal Tools, 44 *Tulsa L. Rev.* 93 (2008).

1. Courses

Law School courses on sustainability, or that include sustainability concepts, are growing in number and scope. These include:

- Courses or seminars in sustainable development. Law schools with such courses include Arizona,⁷⁹ Florida,⁸⁰ Florida State,⁸¹ Texas,⁸² UCLA,⁸³ and Widener.⁸⁴ Arizona State offers a course, jointly developed by the law school and ASU's School of Sustainability, entitled Legal Issues in Sustainability.⁸⁵
- Courses that explicitly apply a sustainable development perspective.⁸⁶ Denver and George Washington offer courses on sustainable growth management as well as sustainable development and international trade.⁸⁷ Other courses with an explicit sustainability perspective include Strategic Planning for Sustainable Development⁸⁸ and Sustainable

79. University of Arizona, James E. Rogers College of Law, Sustainability and Environmental Policy (603j), *available at* <http://www.law.arizona.edu/UALaw/AcademicProgram/Schedules/Master/SecondThirdYr/Sustainability%20and%20Environmental%20Policy.htm>.
80. University of Florida, Levin College of Law, Environmental & Land Use Law: Curriculum, *available at* <http://www.law.ufl.edu/elulp/curriculum/courses.shtml>.
81. Florida State University College of Law, Sustainable Development Seminar (3 credits), *available at* http://law.fsu.edu/academic_programs/curriculum/sustainabledevelopmentseminar.html.
82. University of Texas at Austin, School of Law, Courses and Related Classes: Environmental Law, *available at* http://utdirect.utexas.edu/lorege/car.WBX?area_key=0003225&year=2009&semester=6.
83. UCLA Law School, Law 505-Seminar: Sustainability, Green Development and the Law (Prof. Freilich), *available at* <http://www.law.ucla.edu/home/index.asp?page=3086>.
84. *See infra* note 132 and accompanying text.
85. E-mail from Prof. Gary Marchant, Arizona State University Law School (Oct. 24, 2008) (on file with author).
86. Many other courses have a sustainability perspective without the use of “sustainable development” or “sustainability” in their title. These include, for instance, a course at Minnesota on “environmental remediation and redevelopment.” University of Minnesota Law School, Environmental Remediation & Redevelopment, *available at* <http://www.law.umn.edu/current/coursedetails.html?course=396>.
87. University of Denver, Sturm College of Law, Environmental and Natural Resources Law (2008); George Washington University School of Law, Environmental Law, *available at* <http://www.law.gwu.edu/Academics/curriculum/Pages/envirocrs.aspx>.
88. *See, e.g.*, Environmental Law Center, Vermont Law School, Courses, *available at* <http://www.vermontlaw.edu/x756.xml?all=yes>.

Community Planning in Practice (Vermont),⁸⁹ Sustainability Law and Business (Lewis & Clark),⁹⁰ and Sustainable Energy Law and Policy (Tulane).⁹¹

- Courses or seminars in climate change. A rapidly growing number of law schools offer such courses; Vermont offers three⁹² and Golden Gate has four.⁹³ In fact, many law schools (e.g., Duke, NYU, Stanford, and Yale) have well-established programs on greenhouse gas trading markets.⁹⁴
- Courses or seminars in biodiversity, which also use sustainable development as an explicit or implicit framework.⁹⁵ Schools with biodiversity courses, or that are taught from a biodiversity perspective, include Utah⁹⁶ and Georgia.⁹⁷
- The growing use of sustainable development concepts and principles in environmental law, natural resources law, and international environmental law courses.⁹⁸

89. *Id.*

90. Lewis & Clark School of Law, Law School Registrar, Course Schedule, Sustainability Law and Business Seminar, *available at* <http://legacy.lclark.edu/dept/lawreg/law503.html>.

91. Tulane University Law School, Academics: Sustainable Energy Law and Policy, *available at* http://www.law.tulane.edu/tlsAcademicPrograms/courseDetail.aspx?id=2406&__taxonomyid=2.

92. Environmental Law Center, *supra* note 88. These are Climate Change Law, Climate Change Litigation, and Extinction and Climate Change.

93. Golden Gate University School of Law, Environmental Law Program: Environmental Law in Practice 2 (2008). These are Climate Change and International Law, Global Climate Change and Water Law, Global Warming and the Courts, and Global Warming and Renewable Energy. *Id.*

94. E-mail from Prof. Jonathan B. Wiener, Duke University Law School (Mar. 13, 2009) (on file with author).

95. Environmental Law Center, *supra* note 88.

96. University of Utah, S.J. Quinney College of Law, Course List, *available at* [http://www.law.utah.edu/course-schedule/course-list/\(wildlife law\)](http://www.law.utah.edu/course-schedule/course-list/(wildlife%20law)).

97. University of Georgia Law School, Courses of Instruction, *available at* <http://www.law.uga.edu/facstaffstu/students/handbook/course.html> (environmental law practicum and interdisciplinary environmental law practicum).

98. This is evident in supplemental books and study aids for such courses. *See, e.g.*, Philip Weinberg & Kevin A. Reilly, *Understanding Environmental Law* 437-54 (2d ed., Newark, N.J., LexisNexis Matthew Bender 2008) (discussing sustainability in a chapter on innovations and trends in environmental law); Lakshman D. Guruswamy, *International Environmental Law in a Nutshell* 1 (3d ed., West 2007) ("At its substantive core, [international environmental law] endeavors to control pollution and the depletion of natural resources within a framework of sustainable development."); James Salzman & Barton H. Thompson, Jr., *Environmental Law and Policy* 13, 25-27 (2d ed., West 2007) (describing sustainable development as a theme of environmental law).

2. Textbooks

Many of the changes in classroom teaching are reflected in an increased emphasis on environmental sustainability in textbooks. These include:

- Explicit integration of sustainability concepts into environmental law textbooks. A growing number of environmental law textbooks discuss sustainability and such sustainability principles as intergenerational equity and the precautionary approach.⁹⁹ Many environmental law texts also integrate climate change throughout.¹⁰⁰
- Separate textbooks addressing specific aspects of sustainability, including biodiversity,¹⁰¹ climate change,¹⁰² and human rights and the environment.¹⁰³
- Textbooks in non-environmental subjects (such as property) that have an explicit environmental perspective.¹⁰⁴

3. Programs

Many law schools are developing not just individual courses related to sustainability, but entire academic programs. These include:

- Interdisciplinary programs in law and sustainability. Arizona State is “embarking on the creation of the legal academy’s first integrated program in law and sustainability.”¹⁰⁵ The school is assembling “an alliance of scientists, planners, political scientists, designers, and legal scholars to create a comprehensive Ph.D., LL.M., and Masters level curriculum.”¹⁰⁶

99. *See, e.g.*, Zygmunt J.B. Plater et al., *Environmental Law and Policy: Nature, Law, and Society* 933-991 (4th ed., Wolters Kluwer 2010) (chapter on international and comparative environmental law). But the discussion of sustainability is not limited to this chapter. The text’s summary of cross-cutting themes in environmental law, *id.* at 59-65,—themes that are woven into the entire text—includes sustainable development, intergenerational equity, global interconnections, the polluter-pays principle, and the precautionary principle.

100. *See, e.g.*, Robin Kundis Craig: *Environmental Law in Context: Cases, Materials, and Statutes* (2d ed., West 2008).

101. *See, e.g.*, John Copeland Nagle & J.B. Ruhl, *The Law of Biodiversity and Ecosystem Services* (2d ed., Foundation Press 2006).

102. *See, e.g.*, Richard Hildreth et al., *Climate Change Law: Mitigation and Adaptation* (West 2009); Chris Wold et al., *Climate Change and the Law* (LexisNexis Matthew Bender 2009). Although not necessarily intended as a text, another book that has been used in law school classrooms is *Global Climate Change and U.S. Law*, *supra* note 75.

103. Svitlana Kravchenko & John E. Bonine, *Human Rights and the Environment: Cases, Law, and Policy* (Carolina Academic Press 2008).

104. *See, e.g.*, Paul Goldstein & Barton H. Thompson, Jr., *Property Law: Ownership, Use, and Conservation* (Foundation Press 2006).

105. Sandra Day O’Connor College of Law, Arizona State University, A Message from Dean Paul Schiff Berman, *available at* <http://www.law.asu.edu/News/CollegeofLawNews.aspx?NewsId=2531>.

106. *Id.*

- Environmental clinics that focus on sustainability. The sustainability clinic at the University of Victoria Law School in British Columbia focuses on sustainable land development, green building, and management of energy demand.¹⁰⁷
 - Graduate programs in sustainable development. For example, the University of Washington School of Law offers a graduate program in the law of sustainable international development.¹⁰⁸
 - Certificate programs in sustainability. Willamette students may seek a certificate in “sustainable environmental, energy and resources law,” a program which emphasizes “the role of the lawyer in formulating environmental and natural resources law and policy to sustain and protect our local and global resources.”¹⁰⁹
 - Graduate programs in climate change. Pace recently started a climate change track in its environmental law LL.M. program. Pace has created six new climate change courses, available only to LL.M. candidates, which are intended to respond to the market demand for legal skills.¹¹⁰
 - Joint degree programs related to the environment. Because sustainable development is necessarily interdisciplinary, law students who also obtain another environmental degree will be more capable of understanding and working effectively in a sustainability context. Schools with such programs, many of which have existed for decades, include Duke,¹¹¹ Michigan,¹¹² Stanford,¹¹³ and Yale.¹¹⁴
107. University of Victoria Faculty of Law, Sustainability Law—Environmental Law Clinic—Law 353a, *available at* <http://www.law.uvic.ca/dcurran/353a/syllabus.html>; University of Victoria Faculty of Law, Sustainability Law—Law 353a, <http://www.law.uvic.ca/dcurran/353a/documents/SustainabilityLaw-353a-SyllabusFall2008.pdf>. Non-U.S. law schools could be used to illustrate any of the developments described in this article.
108. University of Washington School of Law, Law of Sustainable International Development Graduate Program, *available at* <http://www.law.washington.edu/SID/>.
109. Willamette University, College of Law, Certificate Program in Sustainable Environmental, Energy and Resources Law, *available at* <http://www.willamette.edu/wucl/programs/certificates/sustainability/>.
110. Pace Law School, LLM in Environmental Law—Climate Change Track, *available at* http://www.pace.edu/page.cfm?doc_id=33340. The six new courses are Climate Adaptive Management, Climate and Insurance, Climate and Corporate Practice, Climate Change Practicum, Disaster Law and Emergency Preparedness, and State and Regional Climate Initiatives. *Id.*
111. Duke University School of Law, Environmental Law @ Duke, *available at* <http://www.law.duke.edu/student/act/enviro/curriculum.htm>.
112. University of Michigan Law School, Dual Degrees and Interdisciplinary Opportunities, *available at* <http://www.law.umich.edu/centersandprograms/clpp/Pages/InterdisciplinaryOpportunities.aspx>.
113. Stanford Law School, Law and Environment and Resources, *available at* <http://www.law.stanford.edu/program/degrees/joint/environment/>.
114. Yale School of Forestry & Environmental Studies, Law (JD) Joint Degree Programs, *available*

B. Scholarship and Research

A basic need for sustainability research and scholarship is analysis, including empirical research on the design and implementation of new or modified legal instruments and institutions. The urgency of the sustainability challenge requires engaged scholarship—writing that provides information, tools, and ideas that policymakers, practicing lawyers, and others can use to address the challenges and opportunities of sustainability. Two related models are suggestive of the kind of research and scholarship that is required. One, “use-inspired basic research,” borrows from sustainability science, a field of inquiry that has been encouraged and supported by the National Academy of Sciences.¹¹⁵ Use-inspired basic research is research that is motivated by a quest for understanding *and* considerations of use.¹¹⁶ It is not solely theoretical or solely practical; it is both. Scientific and technological research on novel methods for long-term, large-scale carbon sequestration or storage would be considered use-inspired. The researcher’s quest for understanding whether these methods are feasible and cost-effective is motivated by the knowledge that feasible and cost-effective methods will likely be used. Similarly, in law and policy, use-inspired research would include construction of a theoretical model to explain which laws are most effective at encouraging people to use less energy when that research is motivated by an interest in encouraging widespread adoption of the most effective laws. The second, which may or may not be different from the first in practice, is policy-relevant research, as opposed to theoretical research.¹¹⁷ This type of research has a rich tradition in environmental law.¹¹⁸ These approaches seem especially appropriate in any effort to engage law on behalf of sustainability.

Law school research practices directed toward sustainability include faculty scholarship and research by centers or institutes.

at <http://environment.yale.edu/about/JD-Joint-Degree/>.

115. William C. Clark, Sustainability Science: A Room of its Own, 104 Proc. Natl. Acad. Sci. 1737 (2007).

116. *Id.*

117. This type of research differs from the first in that it may or may not make a theoretical contribution. A touchstone for such work is “the Wisconsin idea,” which explicitly engages professors in academic institutions, including law schools, in the drafting and development of new laws and programs, as well as other service on behalf of the government and the public. See Paul D. Carrington & Erika King, Law and the Wisconsin Idea, 47 J. Legal Educ. 297, 299 (1997).

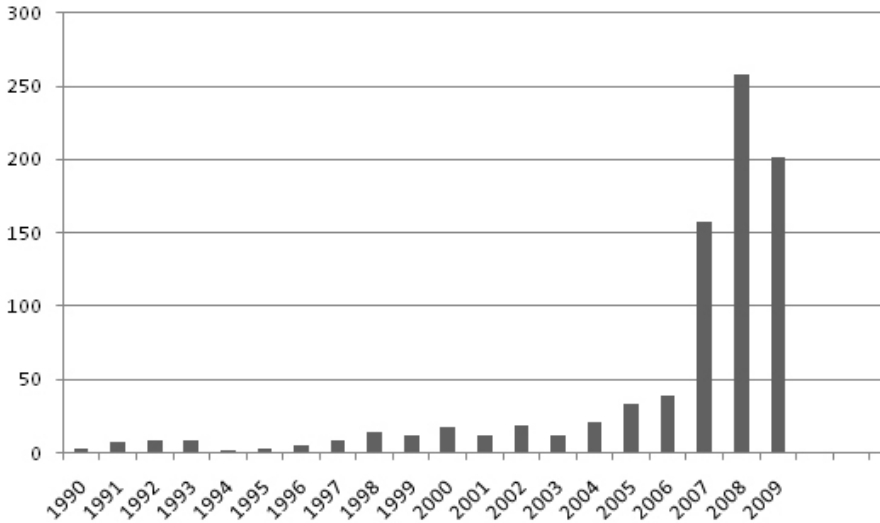
118. For instance, Professor Joseph Sax, who drafted the Michigan Environmental Protection Act, conducted subsequent research on its effectiveness. More recently, Vanderbilt and the Environmental Law Institute created the Environmental Law and Policy Annual Review, to honor “the best law and policy-relevant ideas on the environment from the legal academic literature each year.” Its sponsors seek to shift the “strong incentives to write theoretical work that ignores policy implications” by “recognizing scholars who write articles that not only advance legal theory but also reach policy-relevant conclusions.” Christopher A. Bowles et al., The Environmental Law and Policy Annual Review, 38 *Envtl. L. Rep.* 10,506, 10,506 (2008).

1. Scholarship

Scholarship on sustainability, especially climate change, has grown rapidly in recent years. Key activities include:

- Articles and books on climate change, the most obvious and visible sustainability issue. Table I depicts the explosive growth of law journal articles on climate change in recent years. The number of articles with climate change or global warming in their title grew by a factor of nearly ten between 1990 and 2000 (from three to eighteen), and then by another factor of ten between 2000 and 2009 (from eighteen to more than 200).¹¹⁹ The number of law-related climate change books also grew rapidly between 2000 (two published) and 2009 (thirteen published).¹²⁰

Table I
Law Journal Articles on Climate Change or Global Warming 1990-2009



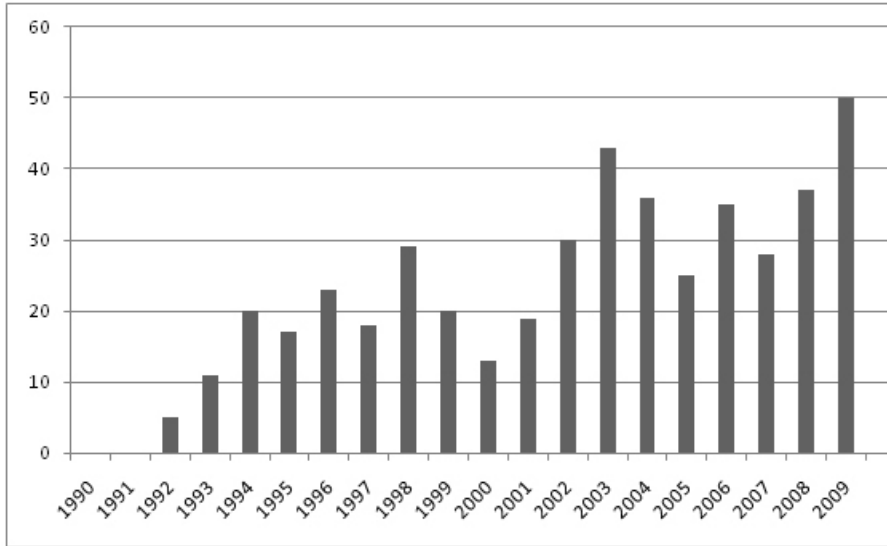
119. Westlaw search by research librarian Ed Sonnenberg, Database = Journals & Law Reviews (JLR)—Search Query = title (climate change or global warming) & date (= year inserted) E-mail from Ed Sonnenberg, Research Librarian, Widener University Law School, to author (Oct. 16, 2010) (on file with author). Because many articles on climate change focus on specific topics such as carbon sequestration and adaptation, the table no doubt understates the total number of articles on climate change published each year. However, presuming that the likelihood of the phrases “climate change” and “global warming” appearing in the title of an article on the subject did not vary with time, the table should accurately reflect the overall trend.

120. *Id.* (Database = Books in Print (BIP); Keyword in Subject = climatic changes; Keyword in Subject = law/environmental; Country of Publication = United States; Language = English).

- Symposia on climate change. A great many schools have held symposia on climate change and published some or all of the papers from those symposia. Recent examples include Georgetown,¹²¹ McGeorge,¹²² Penn,¹²³ and Virginia.¹²⁴
- Climate change journals. New law journals with a climate change focus include San Diego's *Journal of Climate and Energy Law*¹²⁵ and Washington & Lee's *Journal of Energy, Climate, and the Environment*.¹²⁶
- Articles and books on sustainable development. Table II shows that the number of law journal articles published each year with sustainability or sustainable development in their titles has ranged between thirteen and fifty between 1994 and 2009 and appears to be trending upward.¹²⁷ The number of law-related sustainability books published annually has been small but steady.¹²⁸

121. Symposium, Beyond Kyoto—The Developing World and Climate Change, 20 *Geo. Int'l Env'tl. L. Rev.* 521 (2008).
122. Symposium, The Business of Climate Change: Challenges and Opportunities for Multinational Business Enterprises, 20 *Pac. McGeorge Global Bus. & Dev. L.J.* 1 (2007).
123. Symposium, Responses to Climate Change: Law, Economics and Science, 155 *U. Pa. L. Rev.* 1499 (2007).
124. Symposium, Global Climate Change: Individual, Private Sector, and State Responses, 26 *Va. Env'tl. L. J.* 1 (2008).
125. University of San Diego Law School, San Diego Journal of Climate and Energy Law, available at http://www.sandiego.edu/law/news/blogs_publications/publications/journals/climate/.
126. Washington & Lee University School of Law, Journal of Energy, Climate, and the Environment—Welcome, available at <http://law.wlu.edu/jecce/>.
127. Sonnenberg, *supra* note 119. (Database = JLR (Journals & Law Reviews); Search Query = title (sustainability or sustainable development) & date (= year inserted)). Like Table I, this Table does not fully reflect sustainability scholarship because it does not capture articles on specific sustainability subjects such as green building, smart growth, the precautionary approach, and intergenerational equity.
128. Three were published in 2000, and three were published in 2009. *Id.* (Database = Books in Print (BIP); Keyword in Subject = sustainable development; Keyword in Subject = law/environmental; Country of Publication = United States; Language = English; Market = United States).

Table II
Law Journal Articles on Sustainable Development or Sustainability 1990–2009



- Symposia on sustainable development. In 1995, the *Willamette Law Review* published the first U.S. symposium on law and sustainability.¹²⁹ Other symposia on sustainability have been published by Tulsa and Widener.¹³⁰
- Sustainable development journals. American University’s Washington College of Law publishes a student-run journal called *Sustainable Development Law and Policy*.¹³¹
- Student research projects based on seminars or other classes. Seminars at Widener have led to three published articles—on energy consumption, climate change, and sustainable development—all based primarily on student research.¹³²

129. Symposium, *Ecologically Sustainable Development*, 31 *Willamette L. Rev.* 235 (1995).

130. Symposium, *Environmental Sustainability*, 44 *Tulsa L. Rev.* 1 (2008); Symposium, *The Role of Law in Defining Sustainable Development*, 3 *Widener L. Symp. J.* 1 (1998).

131. American University, Washington College of Law, *Sustainable Development Law & Policy*, available at www.wcl.american.edu/org/sustainabledevelopment.

132. John Dernbach and the Widener University Law School Seminar on Energy Efficiency, *Stabilizing and Then Reducing U.S. Energy Consumption: Legal and Policy Tools for Efficiency and Conservation*, 37 *Env'tl. L. Rep.* 10,003 (2007); John Dernbach and the Widener University Law School Seminar on Global Warming, *Moving the Climate Debate from Models to Proposed Legislation: Lessons from State Experience*, 30 *Env'tl. L. Rep.* 10,933 (2000); John Dernbach and the Widener University Law School Seminar on Law

- Research by law school clinics. The Harvard Law and Policy Clinic has published a report explaining how building owners, design professionals, and builders “may successfully build green while reducing costs and avoiding liability.”¹³³
- Applied research that includes law students. The Berkeley Energy and Resources Collaborative has partnered with the Lawrence Berkeley National Laboratory in a Cleantech to Market (C2M) program with teams that include law students. One of the teams is developing intellectual property strategies to bring sustainable technologies to developing countries.¹³⁴

2. Centers and Institutes

An increasing amount of research and scholarship is also growing out of centers or institutes that are focused on sustainability, the use of specific legal tools for sustainability, and specific sustainability issues, including issues relevant to the region in which the school is located. These include:

- Centers or institutes that focus on sustainable development issues or legal tools to foster sustainability. Vermont’s Environmental Tax Policy Institute focuses on the use of taxation to address environmental problems,¹³⁵ and recently published a study on carbon taxes and climate change.¹³⁶ Stetson has an Institute for Biodiversity Law and Policy.¹³⁷
- Centers that are devoted entirely or substantially to climate change. The Berkeley Center for Law, Energy and the Environment, for example, “organizes conferences and publishes reports on carbon market governance, biofuel certification and legal frameworks for carbon sequestration.”¹³⁸ UCLA and Columbia have recently established centers on climate change law.¹³⁹

and Sustainability, U.S. Adherence to Its Agenda 21 Commitments: A Five-Year Review, 27 *Envtl. L. Rep.* 10,504 (1997). The introductory footnote to each of these articles identifies the students in the seminar.

133. Kate Bowers & Leah Cohen, Harvard Law School Environmental Law and Policy Clinic, *The Green Building Revolution: Addressing and Managing Legal Risks and Liabilities* 24 (2009).
134. Sustainability at Berkeley Law 4 (2008) (prepared by Cymie R. Payne and others) (on file with author).
135. Vermont Law School, Environmental Tax Policy Institute, *available at* <http://www.vermontlaw.edu/x2792.xml>.
136. Environmental Tax Policy Institute & Vermont Journal of Environmental Law, *The Reality of Carbon Taxes in the 21st Century* (2008), *available at* [http://www.vermontlaw.edu/Documents/020309-carbonTaxPaper\(o\).pdf](http://www.vermontlaw.edu/Documents/020309-carbonTaxPaper(o).pdf).
137. Stetson University College of Law, Institute for Biodiversity Law and Policy, *available at* <http://www.law.stetson.edu/tmpl/academics/bio/internal-1-sub.aspx?id=618>.
138. Sustainability at Berkeley Law, *supra* note 134, at 3.
139. UCLA Sustainability, UCLA Law School Establish[e]s a Center on Climate Change, Apr.

- Collaborative interdisciplinary research and programs. The Yale Center for Environmental Law and Policy (a joint initiative of the Law School and School of Forestry and Environmental Sciences) and the Columbia University Center for International Earth Science Information Network periodically publish an environmental performance index using quantitative measures that “provide a gauge at a national government scale of how close countries are to established environmental policy goals.”¹⁴⁰ The Center for Applied Sustainability at the University of Arkansas, funded in part by the Wal-Mart Foundation, supports research by the law school and the law school’s National Center for Agricultural Law and Research “on current issues in food law, sustainability networks, and sustainable supply-chain management.”¹⁴¹

C. Buildings and Operations

The physical campus provides a concrete and visible manifestation of a university’s or law school’s commitment to sustainability. It also can be a powerful learning opportunity for students. Law school efforts concerning buildings and operations include the following:

- LEED certification for new buildings.¹⁴² In 2003, University of Denver became the first law school in the country to achieve LEED gold status. Other schools that are seeking, will seek, or have achieved LEED certification include Colorado,¹⁴³ Duke,¹⁴⁴ Marquette,¹⁴⁵ Michigan,¹⁴⁶ and

9, 2008, available at <http://www.sustain.ucla.edu/news/article.asp?parentid=24>; Columbia Law School, Center for Climate Change Law Launched at Columbia, Dec. 11, 2009, available at http://www.law.columbia.edu/media_inquiries/news_events/2008/december2008/climate_change.

140. Yale University Center for Environmental Law & Policy, Columbia University Center for International Earth Science Information Network, 2010 Environmental Performance Index, available at <http://epi.yale.edu/>. In this report, Iceland ranked first among 163 countries, and the United States ranked 61st (between Paraguay and Brazil). Yale University Center for Environmental Law & Policy, Columbia University Center for International Earth Science Information Network, Country Scores, available at <http://epi.yale.edu/Countries>.
141. E-mail from Prof. Steve Sheppard, University of Arkansas Law School (Oct. 19, 2008) (on file with author).
142. Green by Design, *supra* note 66. LEED certification for existing buildings is also available, and can be economically attractive.
143. University of Colorado at Boulder, Wolf Law Building: LEED Certified Law School, available at <http://www.colorado.edu/law/about/wolf/leed.htm>.
144. Duke University Law School, Law School Gets LEED Certification, Duke Environmental Law 6 (2007), available at <http://www.law.duke.edu/news/pdf/envlaw07fall.pdf>.
145. Megan Hupp, Marquette Setting Foundation for Legal Scholarship, Business J. of Milwaukee, Sept. 19, 2008, available at <http://assets.bizjournals.com/milwaukee/stories/2008/09/22/focus1.html>.
146. E-mail from Evan Caminker, Dean, University of Michigan Law School, to author (Jan. 3, 2008) (on file with author).

Thomas M. Cooley.¹⁴⁷ Many of these efforts are driven by university-level commitments that all new buildings will be LEED certified. Indeed, LEED certification for new buildings appears to be an emerging norm for law schools. By contrast, there appears to be relatively little LEED activity for existing buildings.

- Participation in the ABA-EPA Law Office Climate Challenge. George Washington, Hofstra, Michigan State, Pace, Suffolk, Widener, and Howard are recognized on the ABA's web site for their involvement in this program.¹⁴⁸
- Student initiatives. The Environmental Law Society at Berkeley has successfully promoted recycling for bottles, electronic waste, cans, and plastic at the law school.¹⁴⁹

D. Outreach and Service

Outreach and service efforts involve partnering with local communities and regions to promote sustainable development. As Calder and Dautremont-Smith explain, such “partnerships break down the barriers between town and gown, support practical and experiential learning and research, and foster long-term sustainable community development.”¹⁵⁰ Outreach and service at law schools includes:

- Community-centered research and problem solving. Vermont's Land Use Institute proposes legislation and provides legal information to municipalities, citizens, and others on smart growth and other sustainable land use issues.¹⁵¹ Florida's Conservation Clinic has promoted “the principles and practice of sustainability on campus and in community” by, among other things, evaluating the university's master plan for carbon neutrality and by analyzing and evaluating the legal issues involved with an eco-cemetery in Alachua County.¹⁵² Maryland's

147. Thomas M. Cooley Law School, Cooley Law School Commemorates Auburn Hills Campus, available at http://www.cooley.edu/newsevents/2008/012908_auburn_commemorates.html.

148. American Bar Association Section of Environment, Energy, and Resources, The ABA-EPA Law Office Climate Challenge: Law Office Climate Change Partners and Leaders, available at <http://www.abanet.org/environ/climatechallenge/partners.shtml>.

149. Sustainability at Berkeley Law, *supra* note 134, at 4-5.

150. Calder & Dautremont-Smith, *supra* note 27, at 103.

151. Environmental Law Center, Vermont Law School, Land Use Institute, available at <http://www.vermontlaw.edu/x3704.xml>. See also Pace Law School, Land Use Law Center, available at http://www.pace.edu/page.cfm?doc_id=23239. The center works for sustainable communities in New York State.

152. University of Florida Levin College of Law, Conservation Clinic, available at <http://www.law.ufl.edu/conservation/projects/community.shtml>.

clinic has been engaged in an environmental justice case concerning the lack of enforcement of environmental laws in an African-American community in Prince George's County.¹⁵³

- Energy and climate change centers. A growing number of schools, including Colorado,¹⁵⁴ Pace,¹⁵⁵ and San Diego,¹⁵⁶ have energy and climate centers that publish research on state, regional, national, or international issues, engage in regulatory proceedings and litigation on such issues, and involve students in these activities.
- Public lecture programs, roundtables, and other forums. George Washington recently hosted a workshop on sustainable consumption and production organized by the United Nations.¹⁵⁷ Oregon's website includes several dozen podcasts of faculty presentations on climate change and sustainability.¹⁵⁸

E. Student Life

Student life focuses on the student culture at law schools, including school-provided living arrangements, new student orientation, student governance, and other activities that foster active citizen leadership and learning, as well as student participation, support, and advocacy for energy and water conservation, waste reduction, and other sustainability efforts. Student life can also mean students holding "administrators accountable for meeting the sustainability commitments that their schools have made."¹⁵⁹ Sustainability activities in student life at law schools include the following:

- Pace students developed, and persuaded the school to adopt, an environmental sustainability policy.¹⁶⁰
- Oregon students run an annual Public Interest Environmental Law Conference, which draws together "more than 3,000 activists,

153. E-mail from Prof. Jane F. Barrett, Director, Environmental Law Clinic, University of Maryland School of Law (July 24, 2009) (on file with author).

154. University of Colorado Law School, Center for Energy and Environmental Security, *available at* <http://cees.colorado.edu/>.

155. Pace Law School, Pace Energy and Climate Center, About the Center, *available at* http://www.pace.edu/page.cfm?doc_id=23241.

156. University of San Diego Law School, EPIC Legislative Center, *available at* <http://www.sandiego.edu/epic/legislative/>.

157. International Institute for Sustainable Development, North American Workshop on Sustainable Consumption and Production: 6-7 November 2008, *available at* <http://www.iisd.ca/download/pdf/sd/ybvol156num1e.pdf>.

158. University of Oregon Law School, Podcasts, *available at* <http://www.law.uoregon.edu/podcasts/>.

159. Calder & Dautremont-Smith, *supra* note 27, at 103-04.

160. Pace Law School, Pace Law School Accepts American Bar Association/Environmental Protection Agency "Law Office Climate Challenge," Aug. 18, 2008, *available at* http://www.pace.edu/page.cfm?doc_id=31650.

attorneys, students, scientists, and concerned citizens from over fifty countries,” and which focuses increasingly on climate change and other sustainability issues.¹⁶¹

- A Berkeley law student initiated the Cal Climate Action Partnership (CalCAP), a collaboration of faculty, administration, staff, and students working to reduce greenhouse gas emissions at Berkeley to 1990 levels by 2014.¹⁶²
- The Campus Climate Neutral project of the National Association of Environmental Law Societies (NAELS) supports “law and other graduate students, professors, and administrators in developing climate neutral plans for campuses, law schools, and law firms” (e.g., Florida, Vermont).¹⁶³
- Students at Maryland and other schools have helped organize local teach-ins as part of the national climate change program, “Focus the Nation.”¹⁶⁴

F. Institutional Mission, Policy, and Planning

Sustainability initiatives need administration support to realize their objectives, and many of the initiatives described in this article integrate sustainability with strategic planning. Still, it is one thing to make a commitment and quite another to get something specific done. Calder and Dautremont-Smith recommend that “[h]igher education leaders should work to make good on their sustainability pledges, defend them publicly, and ensure that sufficient funding has been allocated to enable implementation.”¹⁶⁵

The activities described above range from efforts that have just been initiated to those that are already bearing fruit:

- Centers and institutes relating to sustainability grow out of a university’s sense of mission, and in many cases appear to amplify or modify its mission.
- Explicit law school sustainability policy. Pace’s environmental sustainability policy is a “comprehensive pledge” to use short- and

161. University of Oregon Law School, About the Public Interest Environmental Law Conference, available at <http://www.pielc.org/pages/about.html>.

162. Sustainability at Berkeley Law, *supra* note 134, at 4. The student was Scott Zimmerman. See also University of California, Berkeley, CalCAP History, available at <http://sustainability.berkeley.edu/calcap/history.html>.

163. E-mail from Durwood Zaelke, President, Institute for Governance & Sustainable Development (May 30, 2008) (on file with author). See also National Association of Environmental Law Societies, Campus Climate Neutral, available at <http://naels.org/content/ccn-campus-climate-neutral>.

164. See, e.g., Andrew Gohn, Maryland Environmental Law Society, School of Law to Co-Host Inaugural “Focus the Nation” Program, Environmental Law at Maryland, Winter/Spring 2008, at 10.

165. Calder & Dautremont-Smith, *supra* note 27, at 104.

long-term goals “to engage in practices that facilitate sustainability in campus purchasing, operations, culture and consumption.”¹⁶⁶

- Internal sustainability process. Progress toward sustainability at universities, colleges, and law schools, of course, would be impossible without some kind of internal process.¹⁶⁷ A good many universities have some kind of green or greening committee that includes representatives from the law school.¹⁶⁸
- Specific steps toward sustainability. Utah is moving from printed to electronic distribution of newsletters, magazines, and other written material.¹⁶⁹
- University commitments that affect their law schools. These include, perhaps most prominently, the ACUPCC pledge.¹⁷⁰
- A law school’s mission of service to community includes sustainability. As is already evident, a great many law schools apply their research, law clinics, and community service activities to address sustainability issues in their state or region.

G. External Stakeholders

For a law school to move effectively toward sustainability, it is helpful and probably necessary for the law school’s external stakeholders to embrace sustainability.¹⁷¹ As previously explained, law organizations, bar associations, nongovernmental organizations, government, and law clients are all helping to drive sustainability at law schools. These stakeholders can also hire law school graduates who have knowledge or experience with sustainability issues, and all are beginning to model sustainable practices (to varying degrees) in their own actions. But a law school’s institutional mission also embraces specific companies, nongovernmental organizations, and other entities within those communities, who also constitute stakeholders. The stakeholders described in this article include the Wal-Mart Foundation, an African-American community in Maryland, municipalities in Florida and Vermont, and state-level policymakers from around the country.

The law school activities described above are not simply mechanical responses to the various drivers described in Part II. They also represent, to varying degrees, efforts by the law schools themselves to actively inform

166. Pace Law School, Environmental Sustainability Policy Statement, *available at* http://www.pace.edu/page.cfm?doc_id=30893.

167. *See* Blackburn, *supra* note 18, at 477-542, for detailed suggestions on how to create and manage an effective sustainability strategy at the college or university level.

168. *See supra* note 29 and accompanying text.

169. University of Utah, S.J. Quinney College of Law, Our Paperless Pursuit, *available at* <http://green.law.utah.edu/>.

170. *See supra* notes 30-33 and accompanying text.

171. Calder & Dautremont-Smith, *supra* note 27, at 94.

their communities about the challenges and opportunities of sustainability, to determine what sustainability-related needs exist in their physical and professional communities, to learn how they can bring their skills and resources to bear in addressing them, and to play a constructive role in moving toward sustainability. A variety of means exist to do these things, including personal outreach by professors and deans, as well as the use of stakeholder or advisory boards. These stakeholder efforts help law schools to tailor their sustainability efforts—in teaching, research, and other activities—to some of their region's most pressing needs.

IV. Conclusion

This Article calls attention to the challenges and opportunities of sustainability, and depicts an impressive range of sustainability activities in which many law schools are already engaged to some degree. The Article also suggests that law schools, as a whole, need to do a great deal more.

There are, of course, a great many options. One is for law schools to emulate, and attempt to improve upon, the best practices of the leading law schools. Another is to work with the American Bar Association as well as relevant state and local bar associations and other groups of lawyers to adapt their suggested sustainable law practices to law schools. Still another is for the Association of American Law Schools to play some kind of leadership or supporting role for such efforts.

President Kennedy's warning about standing on the sidelines during difficult times is especially applicable to sustainability. The national and global problems of environmental degradation, including climate change and loss of biodiversity, as well as the problems of poverty, require extraordinary efforts. Yet they also present extraordinary opportunities to provide a higher quality of life for this and future generations. In the years ahead, how will law schools address these challenges and opportunities?