

*Solidarity and Subsidiarity in a Changing Climate:
Green Building as Legal and Moral Obligation*

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This symposium on Catholic social thought and its place in our environmental politics could not be better timed. Even as we enter the 2008 presidential election, Americans lack a productive vocabulary for climate *disruption*¹ and our part in either its cause or cure. Our consumption of fossil fuels, though steadied for now by a sinking economy, has remained essentially unchanged by the Clean Air Act or any other federal law aimed at “pollution” broadly defined.² Indeed, our “addiction” to “foreign oil” and other fossil fuels is so obvious that even this President bemoans it.³ But the little public deliberation that has occurred on global warming has been bereft of imperatives or, in fact, of much talk about obligation at all.⁴ In this article I argue that our paralysis is due not only to the complexity of this problem, but also to our inability to imagine actions against it that are both practicable and meaningful. Our notions of moral imperatives are

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¹ I thank Professor Linda Malone for the moniker.

² The U.S. Environmental Protection Agency (EPA) has never regulated the emission of greenhouse gases as pollution under the Clean Air Act, although the Supreme Court’s opinion in *Massachusetts v. EPA*, 127 S. Ct. 1438 (2007), concluding that the Act’s definition of “air pollutant” included greenhouse gases, probably put a near-term limit on that particular failure. Fuel economy in the United States will likely remain a national shame, though. In 2002, the National Academy of Sciences concluded that the “corporate average fuel economy” standards maintained by the National Highway Traffic Safety Administration pursuant to a series of legislative mandates had improved the nation’s fuel economy by at most 14%. See NATIONAL ACADEMY OF SCIENCES, BOARD ON ENERGY AND ENVIRONMENTAL SYSTEMS, EFFECTIVENESS AND IMPACT OF CORPORATE AVERAGE FUEL ECONOMY STANDARDS 13-30 (2002).

³ See PETER TERTZAKIAN, A THOUSAND BARRELS A SECOND: THE COMING OIL BREAK POINT AND THE CHALLENGES FACING AN ENERGY DEPENDENT WORLD ix (2007) (“‘America is addicted to oil,’ President George W. Bush declared in his January 2006 State of the Union address.”).

⁴ Gore’s book and movie are the exceptions here in that they did speak to global warming as a public imperative of the highest order *and still* entered popular consciousness and media of many forms.

reductionistic by nature and that makes them unfit for so complex a public problem. But in my view, Catholic social thought's principles of solidarity and subsidiarity could fill important roles in this breach given their proven traction and richness. In a fundamental way, of course, Catholic teachings are better fit for the private than for the public sphere. But progress against this social problem may come only in the form of piecemeal (mostly private) actions for many years to come. In short, these principles could be of truly central importance no matter where they operate.

This article makes the case for solidarity and subsidiarity as principles of applied ethics by injecting them into what must be their most challenging context (and ours): catastrophic global climate disruption. Part I describes what we know about this problem while Part II frames the principles of solidarity and subsidiarity. Part III lays out a context in which global climate disruption and subsidiarity intersect: designing the built environment in the United States and so-called "green building." Part IV situates this context within our land use planning traditions and the coming battle for building standards in our changing climate. Finally, Part V compares building green as a moral and as a legal obligation in our world of unknown possibilities and consequences.

I. A CHANGING CLIMATE: POLITICS IN THE AGE OF ECOLOGY

Americans of all kinds ache for a richer political discourse. Focus groups and professional messaging seem to have stolen from political campaigns what they used to produce: actual deliberation in public. Public political dialogue in this country has long been unproductive, creating little more than derision or polarization on most issues.⁵

⁵ Acrimony is one thing. Being wholly unproductive is another thing entirely and political discourse in the United States seems lately to have migrated to the latter, especially in our

Democracy can be healthy with no serious political argument if there is nevertheless a broad consensus about what is to be done. It can be healthy even if there is no consensus if it does have a culture of argument. But it cannot remain healthy with deep and bitter divisions and no real argument, because it then becomes only a tyranny of numbers.⁶

Recent experience with the electoral arithmetic of red and blue states is probably best understood as its own form of tyranny: the “consultants’ republic.”⁷

Climate disruption has been emblematic of this national decline.⁸ But something remarkable is happening lately. Global warming is no longer being excluded from the public sphere. It is instead gaining an urgency in America that seemed impossible just a few years ago. States and municipalities have begun tackling greenhouse gas emissions in an array of sub-national initiatives.⁹ Furthermore, American citizens, CEOs, and elected officials are dwelling on climate disruption like never before and doing so in the midst of an intractable war, a sagging economy, diminishing American power abroad, and a host of other top-shelf issues that one would easily imagine swamping it in the public consciousness. So what is happening?

environmental politics. See TED NORDHAUS & MICHAEL SHELLINGER, *BREAK THROUGH: FROM THE DEATH OF ENVIRONMENTALISM TO THE POLITICS OF POSSIBILITY* (2007).

⁶ RONALD DWORKIN, *IS DEMOCRACY POSSIBLE HERE?: PRINCIPLES FOR A NEW POLITICAL DEBATE* 6 (2006); see generally JAMES BOHMAN, *PUBLIC DELIBERATION: PLURALISM, COMPLEXITY, AND DEMOCRACY* (2000).

⁷ See Douglas Kysar, *The Consultants’ Republic*, 121 HARV. L. REV. (forthcoming 2008) (reviewing TED NORDHAUS & MICHAEL SHELLINGER, *BREAK THROUGH: FROM THE DEATH OF ENVIRONMENTALISM TO THE POLITICS OF POSSIBILITY* (2007)).

⁸ In the infamous petition denial remanded in *Massachusetts v. EPA*, 127 S.Ct. 1438 (2007), EPA even argued that Congress’s lack of legislative action on climate change and the control of greenhouse gases was the definitive word on the issue as a threat to public health. See Environmental Protection Agency, Notice of Denial of Petition for Rulemaking, 68 Fed. Reg. 52922, 52925-52929 (2003).

⁹ See, e.g., Note, *Foreign Affairs Preemption and State Regulation of Greenhouse Gas Emissions*, 119 HARV. L. REV. 1877 (2006).

We are confident the earth is warming and we are reasonably confident that humanity has played a significant causal role.¹⁰ We are acquiring what seems to be an ability to predict some regional and local outcomes of climate disruption.¹¹ But as to the balance of catastrophe and correction—whether we have sufficient time and/or technology to avert the catastrophic manifestations of climate disruption—we remain utterly baffled. Even after years of mandated data collection¹² and perhaps the single greatest coordinated scientific effort in human history,¹³ we simply do not know with any meaningful degree of certainty what the pace and/or ultimate directions of climate disruption will be. This is not that surprising by itself. “[I]nformation about the environmental consequences of our actions is not free, abundant, and unerringly accurate, but is more typically scarce, costly to assemble, highly uncertain, and variable in quality.”¹⁴ The scale of this problem is what distinguishes it. With legions of the world’s scientists working on it and the entire planet’s health hanging in the balance, we remain deeply uncertain about both means and ends where global warming is concerned. Do the leaders of a developing country have an obligation to limit their contributions of heat-trapping gases to the atmosphere or is their obligation *to their citizens* to grow their economy as fast and as broadly as possible so that they may protect themselves against the harshest effects of climate disruption? This is factual and moral uncertainty combined and it has made public political debate about climate disruption inherently

¹⁰ See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS OF CLIMATE CHANGE 751 (2007) (hereafter IPCC, “PHYSICAL SCIENCE BASIS”).

¹¹ See, e.g., CLIMATE CHANGE AND BIODIVERSITY (Thomas E. Lovejoy & Lee Hannah eds., 2005).

¹² IPCC, PHYSICAL SCIENCE BASIS, supra note 10, at 106-21.

¹³ See IPCC, PHYSICAL SCIENCE BASIS, supra note 10, at 95.

¹⁴ Bradley C. Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government’s Environmental Performance*, 102 COLUM. L. REV. 903, 928 (2002).

unstable, prone to sidetracking, and, thus far at least, highly polarizing and unproductive.¹⁵

For the United States, the problem with *unilateral* emissions cuts is that about four-fifths of the projected growth in global CO₂ emissions over the coming two decades will be from developing nations like China and India.¹⁶ Both economies are projected to sustain double-digit growth for most of that time and both are expected to rely heavily on fossil fuels to do so.¹⁷ The estimates are that China may have already surpassed the U.S. in emissions and that by 2009 it will have certainly done so.¹⁸ Various kinds of “leakage” from one economy to another are possible, perhaps even likely, where only one economy is controlling emissions.¹⁹ Indeed, not only does the threat of leakage undermine the rationality of unilateral emissions cuts; it problematizes virtually everything but comprehensive, trans-systemic emissions cuts where no economy, or at

¹⁵ See, e.g., Steven Mufson & Juliet Eilperin, *Bush Steps Out Front on Climate Issue*, WASH. POST, Sept. 23, 2007, at A14 (“The White House will oppose anything that would ‘make Granny pay 20 percent more for electricity’ if that money were to ‘go to pay for more efficiency in China’”). Professor Bohman has called situations like this one “hypercomplexity”: a “degree of complexity which makes rational public decision making impossible.” BOHMAN, *supra* note 6, at 158.

¹⁶ U.S. ENERGY INFORMATION ADMINISTRATION, *INTERNATIONAL ENERGY OUTLOOK 2006* (2006).

¹⁷ See, e.g., Carolien Kroeze *et al.*, *The Power Sector in China and India: Greenhouse Gas Emissions Reduction Potential and Scenarios for 1990-2020*, 32 ENERGY POL’Y 55, 56 (2004) (“The energy systems in China and India are largely coal-based, so that it can be expected that emissions will increase relatively fast during the coming decades.”).

¹⁸ See Jonathan Baert Wiener, *Think Globally, Act Globally: The Limits of Local Climate Policies*, 155 U. PA. L. REV. 1961, 1967 n.22 (2007).

¹⁹ “Leakage” is an umbrella term for individuals’ strategic reactions seeking to exploit incomplete regulatory controls and/or incentives. It can be geographic, temporal, or behavioral.

[R]estricting forest clearing in Country A would restrict timber supply and raise the world market price for timber, inducing an increase in the quantity of timber harvested in Country B. Prices also affect trade in emissions-intensive products: as Country A restricts its emissions, the price of emissions-intensive goods produced within Country A will rise and the quantity will decrease. Unregulated producers in Country B will respond by increasing their production of these emissions-intensive goods, both for domestic consumption and for export to Country A.

Wiener, *supra* note 18, at 1968.

least no substantial economy, is uncontrolled.²⁰ This is in part why the Kyoto Protocol cratered before it even got going.²¹ “Leakage,” it turns out, is a neutral-sounding term for a brutal truth about modern globalization: if economic competition is the cause of your problem today, unless *more* economic competition (or military force) is its solution, the solution may well be out of reach.

The problem with *multilateral* emissions cuts is the “settlement costs” that inhere in negotiating anything so complex.²² “[T]he most important part of an effective regime to limit climate disruption involves not an agreement among governments but the effective influence of governments on their publics.”²³ Thus, even if nations could lay aside their differences and competitive nature, it would remain unclear that the major nation states have the means necessary to control the earth’s six (almost seven) billion people. Many people behave strategically and to their own immediate advantage, however they find their opportunities. That reality swells the information- and other costs surrounding the negotiation of any multilateral carbon system. Indeed, it swells those costs to gargantuan, virtually prohibitive proportions.²⁴ The risks and consequences of error when decisions of this kind are scaled up become enormous and concentrated. Inaction, not surprisingly, is the norm at such scales.

²⁰ Stefan Felder & Thomas F. Rutherford, *Unilateral CO₂ Reductions and Carbon Leakage: The Consequences of International Trade in Oil and Basic Materials*, 25 J. ENVTL. ECON. & MGMT. 162 (1993).

²¹ See Richard N. Cooper, *Toward a Real Global Warming Treaty*, 77 FOREIGN AFFS. 66 (March/April 1998).

²² See Cooper, *supra* note 21, at 68-74.

²³ Cooper, *supra* note 21, at 70.

²⁴ The 1992 Framework Convention on Climate Change is indicative in this regard. In substance, even at a juncture where much of today’s scientific “consensus” on climate change was already in place (1991-92), the parties simply could not agree how or to what degree to reduce their GHG emissions. See Daniel Bodansky, *The United Nations Framework Convention on Climate Change: A Commentary*, 18 YALE J. INT’L L. 451, 481-92 (1993).

Today, fossil fuels have so many applications—they have been so widely copied for so long—that quickly removing them from the global economy is just not feasible. Nor would it necessarily be the right thing to do. Starvation, death from exposure, *etc.*, would all certainly rise. More than that, though, fossil fuel technology is fundamental to industrial and residential design today, a staple of the way our civilizations imagine their own improvements.²⁵ Yet, as we now know, this technology is unparalleled as a means of externalizing costs. In short, its “subglobal regulation can omit important sources today and induce leakage to unregulated areas tomorrow.”²⁶

Like much economic reasoning, though, the literature on leakage to evade legal controls is more prophecy than proven fact. Indeed, under scrutiny, this kind of reasoning turns out to be quite brittle.²⁷ When good data are assembled, the “leakage” from jurisdictions controlling externalities usually turns out to be much lower and much less predictable than the economists and econometricians like to admit.²⁸ Firms and people relocate for many reasons only some of which are rational. Relocation decisions are often based on imperfect information, personal habits and heuristics, and plain-old sentimentality and love of place. Indeed, most transboundary commercial flows turn out to be much less linear and predictable than economics suggests. In short, to forecast the

²⁵ That is not to say that that outcome was natural or necessary. Fossil fuel technology, principally the combustion-driven production of energy, had its schemers, promoters, and monopolists. See, e.g., EDWIN BLACK, *INTERNAL COMBUSTION: HOW CORPORATIONS AND GOVERNMENTS ADDICTED THE WORLD TO OIL AND DERAILED THE ALTERNATIVES* (2006).

²⁶ Wiener, *supra* note 18, at 1972.

²⁷ A critical analysis of this reasoning based on several case studies is DAVID VOGEL, *TRADING UP: CONSUMER AND ENVIRONMENTAL REGULATION IN A GLOBAL ECONOMY* (2001). Of course, the limitations of case studies on such questions are vividly illustrated by opposite findings using different case studies. See CHARLES FISHMAN, *THE WALMART EFFECT* (2005).

²⁸ See, e.g., Richard L. Revesz, *Federalism and Environmental Regulation: A Public Choice Analysis*, 115 HARV. L. REV. 553 (2001); ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* (1990); see also Wallace E. Oates, *On Environmental Federalism*, 83 VA. L. REV. 1321 (1997).

doom of initiatives that are compromised by jurisdictional mismatch is not only to ignore the virtues of second-best strategies. It is to showcase one's ignorance of the history of *actual* environmental controls in modern capitalism.²⁹ But to say that small-scale actions can work is not to say that they *do* work or that they are immune to the legal pressures that afflict full-scale actions.³⁰ Part II considers the complexity of subsidiarity today.

II. RECOGNIZING THE PRINCIPLES OF SOLIDARITY AND SUBSIDIARITY TODAY

In a 1931 encyclical, *Quadragesimo anno*, Pope Pius XI expressed a teaching that the Catholic Church has regarded as fundamental ever since: "it is an injustice . . . to transfer to the larger and higher collectivity functions which can be performed and provided for by lesser and subordinate bodies."³¹ This became known as the principle of subsidiarity, although its familiarity to Americans (however slight) probably has more to do with the European Union's use of it than with Catholicism's.³² John Paul II recast the principle in epistemic terms and linked it directly to another principle of political and spiritual agency, *the principle of solidarity*. He maintained they were two sides of the same coin. Where solidarity represented a "commitment to the good of one's neighbor," subsidiarity represented a corresponding "conviction that 'needs are best understood and

²⁹ Cf. Wiener, *supra* note 18, at 1973 (observing that "state level strategies could yield some payoffs" on GHGs "including (i) stimulating technological innovation that could diffuse to other unregulated places, (ii) learning by experimentation with alternative policy designs, and (iii) raising the specter of a patchwork of inconsistent state regulations as a political gambit to motivate industry" to support broader regulation).

³⁰ See, e.g., Erwin Chemerinsky *et al.*, California, Climate Change, and the Constitution, 37 ENVTL. L. RPTR. 10653 (2007) (analyzing the constitutional challenges that could arise against a state's greenhouse gas emissions controls).

³¹ Robert K. Vischer, *Subsidiarity as a Principle of Governance: Beyond Devolution*, 35 IND. L.J. 103, 109 (2001) (quoting Pius XI, *Quadragesimo anno* (1931), *reprinted in* SEVEN GREAT ENCYCLICALS 147, para. 79 (1963)).

³² See Paul D. Marquardt, *Subsidiarity and Sovereignty in the European Union*, 18 FORDHAM INT'L L.J. 616, 619 (1994).

satisfied by people who are closest to them.”³³ Subsidiarity demands that the central state defer to its subordinate ranks of government and civil society wherever possible just as solidarity demands that no one’s needs be ignored. Many Catholics now view these two principles as their “rejoinder” to “the triumphant norms of consumerism [that] are ascending to the status of nonnegotiable, absolute values” in America and elsewhere.³⁴ In my view, they sketch a compelling, if complicated, moral vision of personality and political organization.

One should certainly commit to the common good as best she can and it might well be a grave injustice to elevate collective action to broader scales than are necessary. But for anyone whose beliefs are not driven by Catholic faith, or at least by faith alone (and I confess mine are not), the principles of solidarity and subsidiarity are on a very different footing. In fact, their truth is probably no easier to establish in our global economy than, for example, the actual extent of “leakage” of economic activity across national borders. While Catholics ought to subscribe to these principles as Church doctrine, their weight in the secular world must be measured by reason alone. And those measurements turn out to be very complicated.

Perhaps the best place to start is with their existence in fact. Have they played any role in our politics or history and, if so, what role? In recent history, subsidiarity arose within the European Union much as federalism did in the United States: out of the

³³ Robert K. Vischer, *Solidarity, Subsidiarity, and the Consumerist Impetus of American Law*, in *RECOVERING SELF-EVIDENT TRUTHS: CATHOLIC PERSPECTIVES ON AMERICAN LAW* 85, at 85-86 (Michael M. Scaperlanda & Teresa Stanton Collett eds., 2007) (quoting Pope John Paul II, *Sollicitudo rei socialis*, ¶ 38 (1987)).

³⁴ Vischer, *supra* note 33, at 86.

realpolitik of negotiating and establishing concurrent jurisdictions to prescribe.³⁵ That is hardly evidence of its justice. So what do these principles amount to in secular reason? The Green parties of Europe, when they are not arguing that subsidiarity is natural and therefore right, often argue that concentrating power has usually generated ecologically harmful practices.³⁶ Subsidiarity is better by this argument because modern societies' departures from it have ended badly.³⁷ On this footing, it is a principle of practical political action—a principle of agency, so to speak. But it, too, is open to empirical (and perhaps other) doubts.

Increasing centralization has normally been a function of scale in human history and the growth of human industry has usually coincided with environmental disruptions of many kinds. Is it growth or governance that is the cause, though? As Mark Sagoff perceptively aligned the matter two decades ago, our liberalism's instinctual trust in individuals to know their own needs applies to governmental *process* as well as it does chosen ends. That has meant increasing centralization for generations, *especially* on environmental issues.³⁸ No doubt people would lead more fulfilled and meaningful lives if they spent less time acquiring stuff and more time investing their labor and capital in a community.³⁹ What no one has proved yet is that our "sustainability" (whatever that

³⁵ See, e.g., LESLIE FRIEDMAN GOLDSTEIN, *CONSTITUTING FEDERAL SOVEREIGNTY: THE EUROPEAN UNION IN COMPARATIVE CONTEXT* (2001). "Solidarity," the Polish Trade Union founded at the Lenin Shipyard in 1980, a union that agitated quite effectively within the communist bloc, was apparently related to John Paul II's teachings of solidarity as commitment to the common good. See GEORGE WEIGEL, *WITNESS TO HOPE: THE BIOGRAPHY OF JOHN PAUL II* 292 (2005).

³⁶ See ROBERT E. GOODIN, *GREEN POLITICAL THEORY* 115-31 (1992).

³⁷ See ANDREW DOBSON, *GREEN POLITICAL THOUGHT* 120-21 (3d ed. 2000).

³⁸ See MARK SAGOFF, *THE ECONOMY OF THE EARTH: PHILOSOPHY, LAW, AND THE ENVIRONMENT* 146-70 (1988).

³⁹ Progressives of very different stripes make this case today. See, e.g., BILL MCKIBBEN'S *DEEP ECONOMY: THE WEALTH OF COMMUNITIES AND THE DURABLE FUTURE* (2007); MICHAEL J. SANDEL, *DEMOCRACY'S DISCONTENT: AMERICA IN SEARCH OF A PUBLIC PHILOSOPHY* (1996).

means⁴⁰) depends on it.⁴¹ The fact that we have become so environmentally destructive at the same moment our culture and society have tilted so heavily toward the centralized support of consumer markets hardly proves that a liberal constitutional structure is *the* cause, or even a principal cause, of that tilt. In fact, for all we know it may be a still more authoritarian, centralized state that balances our society in the future.

So what role ought the principles of solidarity and subsidiarity play in our political-constitutional lives today? It should be said that without a relatively thick theory of justice in which to situate them, it is hard to prove that the principles of solidarity and subsidiarity are preferable to, or adequate substitutes for, pragmatism in its widest sense.⁴² Catholicism provides that theory for Catholics. But the prevailing liberal theories of justice elevate individual preferences above all until conflict among individuals arise.⁴³ Supposedly, they therefore justify much of our current structure—unless and until our people change their minds. In so much, liberalism is often linked to the “consumerism” of American society today.⁴⁴ Liberalism is, on this thinking, rather incongruent with the principles of solidarity and subsidiarity. In my view, though, given the mutability of preferences both individual and collective, this incongruence is importantly different from incompatibility. An example will illustrate.

⁴⁰ See BRYAN G. NORTON, *SUSTAINABILITY: A PHILOSOPHY OF ADAPTIVE ECOSYSTEM MANAGEMENT* (2005).

⁴¹ This may be because too many variables depend upon each other. See GOODIN, *supra* note 36, at 115-23; DOBSON, *supra* note 37, at 117 (“[T]he dynamics of political accountability cannot easily be made to work in the environmental context: ‘how can politicians be brought to book for decisions whose consequences will only be fully felt long after the individuals concerned have retired from the political stage?’”).

⁴² There is good reason to believe Dewey’s pragmatism (if not that of the Progressive Era as a whole) was of a piece with solidarity and subsidiarity. See JENNIFER WELCHMAN, *DEWEY’S ETHICAL THOUGHT* (1995); see *infra* notes 175-77 and accompanying text.

⁴³ See, e.g., JOHN RAWLS, *A THEORY OF JUSTICE* (1971).

⁴⁴ See, e.g., Vischer, *supra* note 33.

Some environmental policy in our country has adhered to the principle of subsidiarity, if not solidarity: land use policy is still mostly a matter of local control. Indeed, land use controls would be a good metric in any effort to measure the justice of the subsidiarity principle. As many have long argued, the record there is mixed at best,⁴⁵ especially if the protection of nature is the focus.⁴⁶ On the other hand, local control over land use has remained the norm even in the face of powerful centralizing influences. And here, too, myth and misstatement have usually crowded empirical facts out of the public debate about land use, “sprawl,” and other social costs and savings from our localism.⁴⁷ How much of our built environment is what it is because of local—as opposed to state or federal—governance? How much of it is the result of our consumerism? In some sense, these, too, are empirical questions. Practically, though, they turn on extremely controversial judgments rooted in an ever-expanding universe of data.⁴⁸ In fact, whether one thinks the energy-intensive, culturally banal forms of suburbia and exurbia are the vindication of the subsidiarity principle or its defeat probably has more to do with one’s preferences and beliefs than it does empirical knowledge. Still, even suburbia’s defenders ultimately cast individual choice as both the cause and consequence of our built environments.

If I shop at a suburban Wal-Mart rather than a downtown department store or choose to live in an apartment near the old downtown rather than in a single-family house on five acres in exurbia, these choices have an effect on urban form. If my choices are echoed by those of many other people, they can have a profound effect. More than any other human artifact in the world today, our urban areas are

⁴⁵ See generally DAVID RUSK, *CITIES WITHOUT SUBURBS* (3d ed. 2003).

⁴⁶ See Jamison E. Colburn, *Localism’s Ecology: Protecting and Restoring Habitat in the Suburban Nation*, 33 *ECOLOGY L.Q.* 945 (2006).

⁴⁷ See Michael Lewyn, *Five Myths About Sprawl*, 23 *HARV. BLACKLETTER L.J.* 81 (2007) (reviewing ROBERT BRUEGMANN, *SPRAWL: A COMPACT HISTORY* (2005)).

⁴⁸ See BRUEGMANN, *supra* note 47, at 96-112; Colburn, *supra* note 46, at 962-67.

the result of the actions of every citizen, every group, and every institution, every day.⁴⁹

So what is to be done: what practical actions are we to take? Many argue that ‘voting green and living brown’ is hypocritical. But what is green living? Is it driving a Prius and recycling your waste?⁵⁰ Others argue that “collective action can make a real difference to the state of the world, in a way that individual action cannot.”⁵¹ This dispute is where the principles of solidarity and subsidiarity are most needed today. The difference between one’s agency as a consumer and one’s agency as a citizen is almost certainly no *real* difference at all. Americans constantly confront choices with ramifications for each. But should they even try to prioritize between the two? In the balance of this article, I use a land use example to explore this pseudo-boundary and the prioritizations people must confront in the shadow of catastrophic climate disruption. The example I use is so-called “green building.”

III. THE GROWTH OF GREEN BUILDING IN THE UNITED STATES, 1998-2008

‘Green building’ barely registered in the United States a decade ago. Today, it accounts for more than ten percent of all new commercial construction⁵² and is still growing. If a subsidiarity theorist were to look at the growth of green building here, she

⁴⁹ BRUEGMANN, *supra* note 47, at 225.

⁵⁰ Another contributor to this Symposium, Professor Andrew Morriss, tells a tale of the awful mining pit behind the Toyota Prius’s battery meant to prove Priuses are actually more environmentally harmful than, for example, GM’s Hummer. Even assuming it is true (and there are good reasons to doubt that tale), I am dubious of its relevance to any *real* question—except perhaps as further proof that the larger businesses grow, the more opaque they become to their customers and the less able consumers are to make informed judgments.

⁵¹ GOODIN, *supra* note 36, at 121.

⁵² See BUILDING DESIGN+CONSTRUCTION, *White Paper on Green Buildings and the Bottom Line* (2006).

would identify one particular “mediating structure”⁵³ leading this growth and empowering consumers to make informed choices: the U.S. Green Building Council (USGBC). Last year, the USGBC rolled out its standards for the construction of residential housing: “Leadership in Energy and Environmental Design” (LEED) for Homes.⁵⁴ The LEED for Homes rollout has been a sensation in itself and is now the subject of a massive power struggle. Part III describes the furious—some would say *viral*—growth of the USGBC standards for green construction since 1998 and the present state of this art. Part III describes the political struggle now emerging between USGBC and another giant in the construction industry, the National Association of Home Builders (NAHB).

The nonprofit USGBC was formed in 1993 with some financial help from the U.S. Department of Energy.⁵⁵ Today it bills itself as a “community of more than 11,000 organizations from every sector of the building industry united by a common purpose: to transform the building marketplace to sustainability.”⁵⁶ USGBC bills its LEED standards as “voluntary, market-driven building rating system based on existing proven technology that derives market strength and credibility through industry-wide development of the LEED products.”⁵⁷ Since its founding and its 1998 release of its first standard, LEED for New Construction (LEED-NC),⁵⁸ the USGBC has become a giant of measuring,

⁵³ “Mediating structures” are “those institutions standing between the individual in his private life and the large institutions of public life.” Vischer, *supra* note 31, at 116.

⁵⁴ U.S. GREEN BUILDING COUNCIL, LEED FOR HOMES PROGRAM—PILOT RATING SYSTEM (Version 1.11a 2007), available at <http://www.usgbc.org/LEED> (hereafter LEED-H).

⁵⁵ See Barnaby J. Feder, *Environmentally Conscious Development*, N.Y. TIMES (Aug. 25, 2004).

⁵⁶ See <http://www.usgbc.org/about>.

⁵⁷ LEED-H, *supra* note 54, at 2.

⁵⁸ The first iteration of LEED-NC was piloted in 1998 but immediately reformulated based on feedback from the public and re-released two years later. The 2000 “Version 2.0” of LEED-NC became a force in green building thereafter almost over night. See

benchmarking, and branding environmental performance in the construction sector.

“With significant and favorable recent coverage in the *New York Times*, *Vanity Fair*, and the trade publications of builders and design professionals . . . green building has acquired an undeniable cachet among groups not always aligned.”⁵⁹ Today, the tidal wave of interest in green building is making the USGBC into a potent force.⁶⁰ Indeed, it is no exaggeration to say that USGBC is at least *beginning* to ‘govern through markets.’⁶¹

At the core of the LEED system, counterbalancing its flexibility, is the requirement that a third party assess the building as built and rate it independent of the builder.⁶² Third party certification adds a layer of cost to LEED beyond any higher costs from the building’s higher caliber construction.⁶³ USGBC estimates that a certification under its LEED for Homes, for example, will cost between \$500 and \$2000 per unit depending on a number of variables.⁶⁴ But most everything else is within the builder’s power to balance as its own resources and site(s) permit.⁶⁵ This combination of firm/site

⁵⁹ Brian D. Anderson, *Legal and Business Issues of Green Building*, 79 WISC. LAWYER 10 (Aug. 2006).

⁶⁰ Anderson, *supra* note 59, at 12 (“Although other rating systems exist, the USGBC has virtually cornered the market on the rating of green commercial buildings.”).

⁶¹ See BENJAMIN CASHORE ET AL., *GOVERNING THROUGH MARKETS: FOREST CERTIFICATION AND THE EMERGENCE OF NON-STATE AUTHORITY* (2004) (comparing several factors in measuring the strength of Forest Stewardship Council certification of forest products in different markets).

⁶² USGBC issues “credit interpretations” as necessary. See LEED–H, *supra* note 54, at 21.

⁶³ The principles of accounting sorting out the costs of buildings over their useful lives are in flux today. Some argue that proper cost accounting yields net savings when standards like LEEDs are met. See Ed Bartlett & Nigel Howard, *Informing the Decision Makers on the Cost and Value of Green Building*, 28 BUILD. RES. & INF. 315 (2000) (showing different methods of cost accounting for different interested parties that yield net savings from energy efficient construction investments). Others argue that cost savings from efficiencies alone will probably not recoup the added costs of construction for a long time to come. See generally Niklaus Kohler & Thomas Lützkendorf, *Integrated Life-Cycle Analysis*, 30 BUILD. RES. & INF. 338 (2002).

⁶⁴ See <http://www.usgbc.org/ShowFile.aspx?DocumentID=3356>.

⁶⁵ Intra-firm flexibility has been cited as a key to LEED’s success in the construction industry. See Jesse Ratcliffe, *Reenvisioning the Risk Bubble: Utilizing a System of Intra-Firm Risk Trading for Environmental Protection*, 92 CAL. L. REV. 1779, 1818 (2004).

flexibility,⁶⁶ third party certification,⁶⁷ and nationwide branding⁶⁸ has catapulted the LEED standards to today's forefront of green consumption—or at least green consumerism. What they do next turns in good part on how the law responds to their terrific growth.

Each LEED standard measures overall building performance across a suite of environmental and energy concerns and is meant to provide a nationally uniform benchmark as such.⁶⁹ The suite consists of siting, water conservation, energy and material conservation, indoor air quality, and a catchall category for innovative design.⁷⁰ Each part of the suite has mandatory elements and then a wider set of optional goals that acquire points. The better the building's performance on water conservation, for example, the more points it collects toward its overall score. Scores are composited from all the categories to earn the building's LEED "rating." Ratings range from a low of certified to silver, gold, and a high of platinum⁷¹—although only a tiny fraction of building today is at the gold level or higher. Now it must be said that the "concept of controlling and measuring the impact of the construction of modern buildings on the environment is [still] quite new and revolutionary, especially at the level of detail"

⁶⁶ See Ratcliffe, *supra* note 65.

⁶⁷ On the value of third party certification, see Jamie Grodsky, *Certified Green: The Law and Future of Environmental Labeling*, 10 YALE J. REG. 147 (1993).

⁶⁸ On the importance of a brand in environmental certifications, see Misty Archambault, *Making the Brand: Using Brand Management to Encourage Market Acceptance of Forestry Certification*, 81 N.Y.U.L. REV. 1400 (2006).

⁶⁹ See, e.g., LEED-H, *supra* note 54, at 5 ("While there are already a number of local or regional green home building programs, LEED for Homes is attempting to provide national consistency in defining the features of a green home and to enable builders anywhere in the country to obtain a green rating on their homes.").

⁷⁰ See LEED-H, *supra* note 54, at 2; Stephen T. Del Percio, *The Skyscraper, Green Design and the LEED Green Building Rating System: The Creation of Uniform Standards for the 21st Century of the Perpetuation of An Architectural Fiction?*, 28 ENVIRONS 117, 121-22 (2004).

⁷¹ Del Percio, *supra* note 70, at 121.

undertaken by the LEED standards.⁷² Indeed, the biggest challenge right now is the continued development of “life cycle analysis” itself—the complex analytical work of assessing the *total* costs and benefits of a design/build/operate enterprise.⁷³ Design choices too often have unintended and unforeseen consequences. At the very least, this kind of life cycle analysis entails high, and sometimes extreme, information costs. At worst, it is pointless because necessary information is too costly to acquire.

Focusing on the construction sector was common sense. While only constituting 8% of gross domestic product (GDP), it accounts for roughly 40% of the raw materials we take from the earth annually⁷⁴ and more than a third of what we landfill.⁷⁵ If the operational lives of our buildings are counted, they come to over 60% of all the electricity we use⁷⁶ and, by some estimates, 40% of our total GHG emissions.⁷⁷ When and if the tradeoffs buried in our design decisions are factored into official estimates of “economic growth,”⁷⁸ though, Americans’ views of GDP might shift dramatically. Focusing on the residential construction sector in particular sharpens the point. It alone amounts to an estimated 22% of the total energy consumed in the U.S. and 74% of its municipal water

⁷² International Code Council, *Green Building White Paper 2* (March 2007) (hereafter “ICC White Paper”) (copy on file with author).

⁷³ See Kohler & Lützkendorf, *supra* note 63. “The determination of what are the proper applications of new concepts such as life cycle analysis . . . and embodied energy . . . are still in their early stages of development.” ICC White Paper, *supra* note 72, at 3.

⁷⁴ Charles J. Kibert, *Policy Instruments for a Sustainable Built Environment*, 17 J. LAND USE & ENVTL. L. 379, 384 (2002).

⁷⁵ Del Percio, *supra* note 70, at 125-26.

⁷⁶ U.S. GREEN BUILDING COUNCIL, *NEW CONSTRUCTION VERSION 2.2 REFERENCE GUIDE 12* (2d ed. 2006).

⁷⁷ The International Energy Agency studied OECD countries in 2005 and estimated that buildings accounted for 30-40% of national energy use and gave a central estimate of 30% of total GHG emissions in those countries. See INTERNATIONAL ENERGY AGENCY, *CO₂ EMISSIONS FROM FUEL COMBUSTION, 1971-2005* at II-92-100 (2007).

⁷⁸ See RICHARD T.T. FOREMAN ET AL., *ROAD ECOLOGY: SCIENCE AND SOLUTIONS* 55-62 (2003).

consumption.⁷⁹ Residential development and its attendant infrastructure, indeed, are now the major challenges for biodiversity, water quality, and soil protection advocates.⁸⁰ As more homes are built on more land with higher opportunity costs in the form of the disturbances they bring, the systemic costs generated by our land use policies are becoming clearer. Like so many missed opportunities in our politics, though, people are left to perceive these risks as individuals, without the aid of collective deliberation.⁸¹

So does building green cost more or is it really just a catalyst for rethinking design and design teams?⁸² A homeowner may wonder whether the premium she pays to build a LEED-H home is giving her a higher caliber home or just a sense of moral superiority. A good part of that turns on what the future holds for water and energy. A home that is designed to use less is likely to be more comfortable, secure, and valuable in a future of scarcity than one that is not. But a future of *uneven* scarcity, where national and/or state policies subsidize water and energy availability within the borders of

⁷⁹ LEED-H, *supra* note 54, at 4. Haphazard residential development is already contributing to serious water shortages in many parts of the country. See ROBERT J. GLENNON, *WATER FOLLIES: GROUNDWATER PUMPING AND THE FATE OF AMERICA'S FRESH WATERS* 195-224 (2004). But energy use is more likely to be a true backstop. A study released by New York City last year observed that city residents produce 70% less greenhouse gases per capita simply because "less energy is needed to heat, cool, light, and fuel buildings in the city because they are more densely packed and because residences are smaller than the national average." John R. Nolon, & Jessica Bacher, *Zoning and Land Use Planning*, 36 REAL ESTATE L.J. 211, 212 (2007) (citing Inventory of New York City Greenhouse Gas Emissions, April 10, 2007, available at www.nyc.gov/html/om/pdf/ccp_report041007.pdf).

⁸⁰ See ERIC T. FREYFOGLE, *WHY CONSERVATION IS FAILING AND HOW IT CAN REGAIN GROUND* (2006).

⁸¹ Perceptions of such risks are as skewed as they are central to a functioning democracy. See generally Paul Slovic, *Perception of Risk*, 236 SCIENCE 280 (1987); Paul Slovic, *Perceived Risk, Trust, and Democracy*, 13 RISK ANALYSIS 675 (1993).

⁸² Two studies carried out on LEED standards independent of USGBC by Davis Langdon, a property and construction firm, found that "there is no significant difference in average costs for green building as compared to green building" but that "[u]ntil design teams understand that green design is not additive, it will be difficult to overcome the notion that green costs more, especially in an era of rapid cost escalation." Davis Langdon, *Cost of Green Revisited: Reexamining the Feasibility and Cost Impact of Sustainable Design in the Light of Increased Market Adoption* 3 (July 2007) (hereafter "*Cost of Green Revisited*").

particular jurisdictions—thereby externalizing the scarcity—erases the differences between our two homes *as homes*. And, indeed, like the national leader unsure whether to trust others to reduce their GHG emissions or rather to grow their national wealth in preparation for catastrophic climate disruption, people are in a quandary when it comes to practical action against GHGs. They are left to doubt whether cooperating with some is irrational unless and until you can cooperate with all. This seems to be a kind of Green’s dilemma.⁸³

EPA estimates that the average American family spends about \$1300 annually on home energy (NAHB estimates about \$1600).⁸⁴ Individual consumers are somewhat like nation states as market actors: when prices rise, their behaviors shift.⁸⁵ With energy costs rising, people are demanding energy efficiency in their buildings—including their homes—so this market is growing. A recent study by NAHB estimated that the residential green building marketplace will grow from \$7.4 billion in 2005 to between

⁸³ Professor Goodin portrays such dilemmas as a Prisoner’s Dilemma, GOODIN, *supra* note 36, at 167-68, but it is unclear that the Prisoner’s Dilemma adequately describes the “strategy space” here. The strategy space in any game is comprised of the available strategies of each player in the game. See DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* 10 (1994). With respect to choices and outcomes like those mentioned above, there are many more strategies that could at least possibly dominate than simply cooperating or not cooperating. See *id.* at 19-46, 57-63 (describing limited cooperation, cooperation and defect, and ganging up in *n*-player games).

⁸⁴ BUILDING DESIGN+CONSTRUCTION, *White Paper on Green Building and the Bottom Line* 28 (Nov. 2006) (hereafter “BD+C White Paper”).

⁸⁵ “The Brazilian Alcohol Program (PROALCOOL)—to produce ethanol from sugarcane—was established during the ’70s, as a consequence of the oil crisis, aiming to reduce oil imports, as well as to solve the problem of fluctuating sugar prices in the international market.” José Goldemberg *et al.*, *How Adequate Policies Can Push Renewables*, 32 *ENERGY POL’Y* 1141, 1143 (2004). Today, PROALCOOL is a significant fuel source in Brazil, *id.*, although its GHG reductions are unproven at best. See Renton Righelato & Dominick Spracklen, *Carbon Mitigation by Biofuels or By Saving and Restoring Forests?*, 317 *SCIENCE* 902 (2007) (showing significantly higher GHG emissions from the clearcutting of forests needed for the production of biofuels than from the protection and restoration of the forests themselves).

\$19 and \$38 billion by 2010⁸⁶ and some 82% of the builders surveyed recently said energy efficiency was what green home buyers sought most.⁸⁷ LEED, of course, measures a building's energy conservation in tandem with its material and water conservation, indoor air quality, and its location, and these factors may rival each other to some degree. Yet the LEED standards, even as composites, represent a tremendous tool for communities and consumers seeking better energy and water efficiency. Like building codes generally, LEED standards fill a need by gauging the states of several distinct arts for those unable to do so themselves; they function as a surrogate for individuated judgments. But such surrogates can offer tremendous advantages. Especially today as "greenwashing" is become a high art and terms like "conservation development" are entering the language,⁸⁸ tools such as this can be vital for buyers unsure how to verify the truth of claims made by sellers.

They can be vital for communities as well, though. Overall hazard mitigation through land use planning is back on the agenda after Hurricane Katrina and the many clues that more disasters of its kind are coming.⁸⁹ Energy purchases from wholesalers are usually for communities (if not whole regions) and, in the future, demand management may well be the difference between rolling blackouts and adequate

⁸⁶ Anderson, *supra* note 59, at 10.

⁸⁷ BD+C White Paper, *supra* note 84, at 28.

⁸⁸ See Jeffrey C. Milder, *A Framework for Understanding Conservation Development and Its Ecological Implications*, 57 *BIO SCIENCE* 757 (2007). So that I am not misunderstood, Milder's work is aimed at serious "conservation and limited development projects." But he acknowledges that a major "concern is that developers will manipulate the conservation development label to attain advantages in project permitting and marketing in such a way that the concepts function as little more than a smoke screen for conventional sprawl." *Id.* at 766. Indeed, he continues, "this concern has already been borne out in some projects." *Id.* Third party certification is one means of controlling such greenwashing.

⁸⁹ See, e.g., *LOSING GROUND: A NATION ON EDGE* (John R. Nolon & Daniel B. Rodriguez eds., 2007).

supply.⁹⁰ Even the optimistic climate models give a better than two-thirds chance of major water supply catastrophes throughout much of the southwestern United States in the second half of this century as a warmer climate evaporates more surface water and melts more snow pack more quickly.⁹¹ Significant water conservation in many parts of the country is why further development is even still *possible*—and it seems that our changing climate will make that true in more places in the not-too-distant future.⁹² Indeed, prolonged drought will probably be a reality for many sooner rather than later. Thus, the same story of energy supply and a coming age of conflict may foretell much of what lies in store for water, as well.⁹³ Part IV situates this story in our legal system’s localism.

IV. LAND USE PLANNING AND BUILDING CODES: LOCALISM’S HOME

With the exception of our islands of federal lands, there is no such thing as federal land use planning. Indeed, until very recently, the regulation of development was almost exclusively a state and local matter. The 1992 Energy Policy and Conservation Act mandated minimal energy conservation standards for major home appliances and, for example, a standard that household toilets use no more than 1.6 gallons per flush.⁹⁴ The Telecommunications Act of 1996 preempted any local or state land use law interfering

⁹⁰ See Steven Ferrey, *The Eagles of Destruction: The Role of the Courts in a Restructured Environment*, 32 ENVTL. L. 297 (2002); Steven J. Eagle, *Securing a Reliable Electricity Grid: A New Era in Transmission Siting Regulation?*, 73 TENN. L. REV. 1 (2005).

⁹¹ See Richard Seager et al., *Model Projections of an Imminent Transition to a More Arid Climate in Southwestern North America*, 316 SCIENCE 1181 (2007).

⁹² See Jon Gertner, *The Future is Drying Up*, N.Y. TIMES MAG. (Oct. 21, 2007).

⁹³ See generally GLENNON, *supra* note 79.

⁹⁴ See 42 U.S.C. § 6295(k)(1)(A) (2004). The other major exception is the National Manufactured Housing Construction and Safety Standards Act, 42 U.S.C. §§ 5401-5426, which preempts local building codes as against manufactured housing. See, e.g., *Scurlock v. City of Lynn Haven*, 858 F.2d 1521 (11th Cir. 1998).

with the installation of satellite dishes on a home.⁹⁵ A few other provisions of federal law have drilled down to regulate private land development directly.⁹⁶ For the most part, though, federal law only *indirectly* regulates private home building through the supply of public subsidies.⁹⁷ This relatively invisible federal influence has encouraged road-dependent—and, thus, energy-dependent—growth by localities by hiding many of its costs.⁹⁸ Indeed, our civic religion of “local control” over land use and, in particular, over zoning, keeps us blissfully ignorant of the fact that these federal subsidies explain land use choices in the United States to a good extent. Part IV briefly describes our land use law and how it has co-evolved with suburbia into a world of self-regarding localities normally not disposed to consider the “common good.”

A. From Building Cities to Building Suburbs

Building codes have long intersected various social and political debates, even as those debates themselves change course. Consider the role of fire. It was the first threat to which American cities reacted with taut building codes.⁹⁹ New York City, like others before and after it, endured “Great Fires” in the 1830s and 1840s and by 1850 had

⁹⁵ See . The Act also empowered parties aggrieved by localities denying the right to construct a cellular tower. See 47 U.S.C. § 337; *Nextel West Corp. v. Unity Twp.*, 282 F.3d 257 (3d Cir. 2002); *Town of Amherst v. Omnipoint Comm. Enters., Inc.*, 173 F.3d 9 (1st Cir. 1999).

⁹⁶ The Religious Land Use and Institutionalized Persons Act (RLUIPA) is probably the most prominent contemporary example. See 42 U.S.C. §§ 2000 *et seq.*; Marci A. Hamilton, *Federalism and the Public Good: The True Story Behind the Religious Land Use and Institutionalized Persons Act*, 78 IND. L.J. 311 (2003).

⁹⁷ Massive road building subsidies, whether through the Federal Highway Administration or congressional earmarks, have played a starring role in our residential development patterns. See William W. Buzbee, *Urban Sprawl, Federalism, and the Problem of Institutional Complexity*, 68 FORDHAM L. REV. 57 (1999).

⁹⁸ The next logical step—that highways siphon people out of cities and are a principal cause of our urban environments’ livability deficits—is not much of a leap anymore. See Lewyn, *supra* note 47, at 88-91.

⁹⁹ See WILLIAM J. NOVAK, *THE PEOPLE’S WELFARE: LAW AND REGULATION IN NINETEENTH CENTURY AMERICA* 51-82 (1996).

enacted America's first comprehensive fire safety building code.¹⁰⁰ Even then, it was insurers who drove such proactive "public" measures,¹⁰¹ mostly by refusing to insure construction in places without minimum standards. (An insurer could force its insured to meet high standards, but when the substandard adjacent building began the fire, the loss was the same.) A century and a half later, urban fire has been brought to heel, due in good part to building and construction standards. Today, suburban and exurban fire is the real story—one that is growing graver every year.¹⁰² With few federal or state restrictions to speak of, haphazard rural development is unleashing more and more wildland sprawl into fire prone areas that are then perpetually at risk.¹⁰³ "Local control" and the rhetoric of private property, coupled with federal subsidies, have allowed unprecedented levels of low-density sprawl that leaves individual localities to face these risks alone unless and until they can stitch together broader initiatives that do not just induce leakage.¹⁰⁴

The supply of housing is another social and political debate that building codes regularly provoke, though. Shortages of low- and moderate-income housing are often attributed to building codes on the theory that they inflate the costs of building habitable structures and, thus, dampen the supply of affordable housing.¹⁰⁵ The Town of Mount

¹⁰⁰ See ROBERT C. ELLICKSON & VICKIE L. BEEN, *LAND USE CONTROLS: CASES AND MATERIALS* 447 n.1 (3d ed. 2005).

¹⁰¹ See JON C. TEAFORD, *THE UNHERALDED TRIUMPH: CITY GOVERNMENT IN AMERICA, 1870-1900* 198-214 (1984).

¹⁰² See, e.g., Joseph B. Treaster, *Fires' Cost to Insurers Is in Range of \$1 Billion*, N.Y. TIMES, Oct. 25, 2007.

¹⁰³ See Jamison E. Colburn, *The Fire Next Time: Planning Land Uses in the Wildland-Urban Interface*, 31 J. LAND, RES. & ENVT. L. (forthcoming 2008).

¹⁰⁴ See WILLIAM A. FISCHER, *THE ECONOMICS OF ZONING LAWS: A PROPERTY RIGHTS APPROACH TO AMERICAN LAND USE CONTROLS* 63-67 (1985) (describing leakage that results when restrictive zoning and building laws are adopted by only one jurisdiction in a metropolitan region).

¹⁰⁵ See, e.g., STEPHEN R. SEIDEL, *HOUSING COSTS AND GOVERNMENT REGULATIONS: CONFRONTING THE REGULATORY MAZE* (1978).

Laurel personified this debate with its large square footage minimums for new homes.¹⁰⁶ As such minimums rise, undoubtedly, the cost of individual homes rises. As a whole, zoning and building regulations together have been attacked in the courts with exactly this reasoning for decades.¹⁰⁷ Quantifying such theories, though, is a real challenge. In fact, the wider and more sophisticated the analyses become, the less simple accusations aimed at particular zoning and/or safety requirements actually hold up under scrutiny.¹⁰⁸ Of course, stringent design specifications can encourage longer-term use of substandard products already made, raising the same paradoxes as other grandfathering.¹⁰⁹ Some jurisdictions have moved to rehabilitation and total “housing” codes as a result, but it remains unclear whether doing so actually levels the incentives.¹¹⁰ Once again, the practical consequences of collective actions like land use controls are uncertain.

Perhaps this is why building codes today have become a synonym for labyrinth.¹¹¹ Application and enforcement of codes is sometimes so complicated and stifling that legal challenges are justified.¹¹² Indeed, local codes are inevitably a source

¹⁰⁶ See *Southern Burlington County NAACP v. Twp. of Mt. Laurel*, 290 A.2d 465, 470-85 (N.J. Law Div. 1972), *aff'd*, 336 A.2d 713 (N.J. 1975).

¹⁰⁷ See, e.g., *Twp. of Mt. Laurel*, 336 A.2d 713; *Associated Home Builders, Inc. v. City of Livermore*, 557 P.2d 473 (Cal. 1976); *Construction Industry Ass'n v. City of Petaluma*, 522 F.2d 897 (9th Cir. 1976).

¹⁰⁸ See, e.g., Richard F. Muth & Elliot Wetzler, *The Effect of Constraints on Housing Costs*, 3 J. URB. ECON. 57 (1976); Raymond J. Burby *et al.*, *Building Code Enforcement Burdens and Central City Decline*, 66 J. AM. PLAN. ASS'N 143 (2000).

¹⁰⁹ See, e.g., Shi-Ling Hsu, *What's Old Is New: The Problem With New Source Review*, REGULATION 36 (May 2006).

¹¹⁰ Lewyn, *supra* note 47. On the way total housing codes are twisted by enforcement discretion when implemented, see H. Laurence Ross, *Housing Code Enforcement as Law in Action*, 17 LAW & POL'Y 133 (1995).

¹¹¹ See Ross, *supra* note 110, at 135-36.

¹¹² See, e.g., *Boise Cascade Corp. v. Gwinnett County*, 272 F. Supp. 847 (N.D. Ga. 1967); *E.J. Bach v. County of St. Clair*, 576 N.E.2d 1236 (Ill. Ct. App. 1991). Challenges too frequently involve the corrupt application and enforcement of local building codes. See, e.g., *Cruz v. Town of Cicero*, 275 F.3d 579 (7th Cir. 2001).

of legal confusion because most are hybrid creatures of state and local law.¹¹³ The majority of states have building codes composited from distinct code elements governing: (1) all structural systems, fire safety, general safety, and materials, (2) all plumbing, (3) the building's combustion and mechanized equipment, (4) the electrical system, wiring, and electrical devices, (5) energy consumption, and (6) accessibility for the physically disabled.¹¹⁴ And as between the states and their localities, there are four types of authority distributions: (I) state enacted codes that are exclusive and preempt local regulations entirely; (II) state enabling statutes allowing municipalities to enact their own building codes; (III) state enacted codes that provide 'minimum standards' against which qualified localities are permitted to add more stringent requirements; (IV) permutations of (II) and (III) giving preference to particular codes sometimes with exceptions for state buildings which are governed exclusively by state code or code elements of varying stringency. This diversity of models has generated significant confusion over local authority. Whenever questions arise over a particular local requirement in jurisdictions other than type I, builders usually argue that the provision is preempted on the theory that statewide uniformity is more economic.¹¹⁵ Moreover, if a locality's authority grant is ambiguous in any way, or its state's approach to building codes even hints at preemption, many localities are predisposed to inaction.¹¹⁶

To be sure, local control of land use is a widely shared expectation in America. It is a norm that most judges and other officials try to respect most of the time. But it is the exception to local legal authority generally, which is dogged by pervasive judicial

¹¹³ See David Listokin & David B. Hattis, *Building Codes and Housing*, 8 CITYSCAPE 21 (2005).

¹¹⁴ See Listokin & Hattis, *supra* note 113, at 23.

¹¹⁵ See, e.g., *City of Morris v. Sax Investments, Inc.*, 730 N.W.2d 551 (Minn. App. 2007).

¹¹⁶ See David J. Barron, *Reclaiming Home Rule*, 116 HARV. L. REV. 2255 (2003).

skepticism.¹¹⁷ Consider an example: *Early Estates, Inc. v. City of Providence*.¹¹⁸ In that case, a Rhode Island statute authorized cities to adopt ordinances establishing “minimum standards for dwellings” and defined this power grant to include “the conditions, maintenance, use and occupancy of dwellings . . . deemed necessary to make [them] safe, sanitary, and fit for human habitation.”¹¹⁹ Providence’s ordinance required, among other things, proper lighting of common stairways and hot water supplied to every “kitchen sink, lavatory basin, and bathtub or shower.”¹²⁰ The court upheld the lighting requirement, but invalidated the hot water requirement as insufficiently related to insuring “sanitary” dwellings.¹²¹ Textually, the distinction was rather baroque. The fact that a property owner had no duty at common law to supply hot water to a tenant is hardly a reason to find against the city’s interpretation of its delegation.¹²² But judicial skepticism of local governmental power is a commonplace in America.¹²³ Thus, even if (as the dissent in *Early Estates* argued) the city reasonably concluded that hot water supply in kitchens and baths was good for sanitation,¹²⁴ the lack of *express* state authorization provokes questions about local authority routinely.¹²⁵ Outcomes like this may even explain disparate levels of local engagement with issues of broad concern— issues that pervade suburbia and land use regulation generally.¹²⁶

¹¹⁷ See Colburn, *supra* note 46, at 982-89.

¹¹⁸ 174 A.2d 117 (R.I. 1961).

¹¹⁹ *Early Estates, Inc. v. City of Providence*, 174 A.2d 117 (R.I. 1961).

¹²⁰ 174 A.2d at 117-18.

¹²¹ *Id.* at 119 (“Can it be said that dwellings . . . lacking [hot water facilities] are unfit for human habitation?”).

¹²² *But see id.* at 119.

¹²³ See Barron, *supra* note 116, at 2260-78.

¹²⁴ 174 A.2d at 120 (Roberts, J., dissenting).

¹²⁵ Barron, *supra* note 116, at 2345-84.

¹²⁶ Barron, *supra* note 116, at 2347-52; Colburn, *supra* note 46, at 977-78.

B. The Ongoing Battle for Green Building's Standards

The world of building codes has been in flux for several years. What had been a world of regional codes administered independently¹²⁷ was, starting in 2000, consolidated into an “International Code Council” (ICC) that now administers a unified system of “I-Codes.”¹²⁸ Most states have adopted the I-Codes.¹²⁹ The National Fire Protection Association code is the alternative fire code in a small minority of states.¹³⁰ The I-Codes are becoming so dominant, in fact, that the ICC has emerged as a very large and powerful “mediating structure” governing the construction industry nationwide. It is far more influential over building standards than any state government or governments combined.¹³¹ Indeed, when NAHB began to detect the growing influence of LEED standards in new construction, it sprung to create its own green building program and to have it inserted into the I-Codes.¹³² Will this preempt localities from adopting LEED?

Whether the I-Codes and their adoptions by particular states and municipalities are in any way *inconsistent* with some particular LEED standard can be an extremely complicated question of fact. The engineering judgments at issue do no favors to

¹²⁷ Listokin and Hattis present the data. Listokin & Hattis, *supra* note 113, at 27-33.

¹²⁸ Listokin & Hattis, *supra* note 113, at 29-31. “Because of the technical complexity of these codes and the time and money needed to keep them updated, most state and local governments have abandoned the development and maintenance of their own codes, and rely on adoption . . . of a model code.” *Id.* at 23.

¹²⁹ See <http://www.iccsafe.org/news/about/>.

¹³⁰ Listokin & Hattis, *supra* note 113, at 28-30.

¹³¹ Presently, the ICC reports that 47 states have adopted its International Building Code, 45 states have adopted its International Residential Code, and 41 states have adopted its International Fire Code. See <http://www.iccsafe.org/government/adoption/html>.

¹³² See Lew Sichelman, *NAHB, LEED Squaring Off to Establish a Green Standard*, CHI. TRIB., Aug. 19, 2007; *cf.* Felicia Oliver, *Vying To Be America's Green Home Building Standard*, HOUSINGZONE, June 19, 2007 (“NAHB wanted to move quickly in giving . . . builders and legislators a ‘credible, cost-effective, nationally recognized program, with streamlined administration and certification procedures’ . . .”).

transparency here.¹³³ USGBC maintains that none of its standards will compromise the safety or integrity of a building, but the information costs alone of cross-walking a LEED standard into a real building code could be prohibitive. Moreover, rent seeking in legislative chambers is routinely clothed in public health and welfare appearances. Those actors invested heavily in compliance with extant building codes will certainly welcome incremental changes of those codes before they will top-to-bottom overhauls. And the municipal adoption of LEED standards in lieu of the current ICC energy code would be just such an overhaul. So will the *realpolitik* of Washington spell LEED's demise in this battle to set the standard? Part V considers that question alongside the quandary that green building puts each of us in amidst our fossil fuel economy.

V. GREEN BUILDING AS LEGAL AND MORAL OBLIGATION

Comparing the risks and rewards of consumption and development at the local level connects them to people's lived experiences much more directly than if we were simply bringing them up for a vote in Congress's budgetary bills or a logroll the size of the Energy Policy Act of 2005.¹³⁴ It situates the tradeoffs at a human scale and makes it easier for citizen-consumers to gauge the risks and benefits they are being asked to balance. More importantly, though, it dampens the error costs of any particular decision: most sorts of mistakes by local government are of lesser consequence than any corresponding mistake by the federal government. Any justification of subsidiarity along

¹³³ Moreover, there are usually several different paths to LEED certification for any particular project and, thus, inconsistency with governing law in the strict sense should be rare. See Christopher D. Montez, Darren Olsen, *The LEED Green Building Rating System and Related Legislation and Governmental Standards Concerning Sustainable Construction*, 25 CONSTR. LAWYER 38 (Summer 2005).

¹³⁴ On the layers of pork stuffed into the Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594, see Eagle, *supra* note 90, at 32-46.

these lines bears similarities to the libertarian attack on central government generally, championed in the twentieth century by Hayek and others.¹³⁵ But it need not adopt that justification in full and, in fact, it is much better justified and explicated as a matter of practical reasoning in a large democratic society. Part V makes that case.

Now surely most municipalities in America are authorized to take a variety of steps that encourage the adoption of LEED standards within their jurisdiction if they so chose. A municipality might, for example, provide various tax incentives to builders willing to have their projects LEED certified.¹³⁶ It might hire a LEED certification specialist onto its payroll and provide that service to residents and local builders free of charge.¹³⁷ It might condition the supply of public support and infrastructure like water, sewer, roads, and/or schools on the adoption of LEED standards development-by-development.¹³⁸ A municipality also might mandate that builders disclose LEED building options and prices to prospective buyers on the theory that such disclosures will generate their own demand. Or it might take steps to underwrite and subsidize life cycle analyses of *all* the products and services delivered within its borders.¹³⁹ Each of these actions is permissive, not (necessarily) coercive.

¹³⁵ Of course, Hayek and his disciples do not stop at subsidiarity. Their epistemic attack on governance ranges widely and covers most forms of public control of private preferences. See, e.g., RANDY E. BARNETT, *THE STRUCTURE OF LIBERTY: JUSTICE AND THE RULE OF LAW* (1998).

¹³⁶ USGBC maintains an updated list of such jurisdictions on its website at <https://www.usgbc.org/ShowFile.aspx?DocumentID=2021>.

¹³⁷ This would drastically reduce the costs of certification. For homes, these costs are estimated to range between \$500 and \$2000 per certification. See *supra* note 64 and accompanying text.

¹³⁸ The authority to trade public services or permissions to land owners on various conditions is widely presumed and is—unless expressly denied by local legislation or precedent—implied within the police power. See Mark Fenster, *Regulating Land Use in a Constitutional Shadow: The Institutional Contexts of Exactions*, 58 HASTINGS L.J. 729 (2007).

¹³⁹ LEED standards are but one species of life cycle analysis—a form of design based upon the total impact of a product or service from its beginning to its “end.” See *generally* WILLIAM

But let us suppose that a municipality wished to *require* that all, most, or some of the new construction within its borders meet some specified LEED rating level(s).¹⁴⁰ This would transform a voluntary, market-based performance measurement into a legal obligation. Of course, people within individual municipalities would have to work cooperatively to enact this legal obligation, perhaps for many months or years. And they would have little assurance the law would survive the inevitable legal challenges¹⁴¹ or that it would not just push its own “leakage.” Surprisingly enough, though, some jurisdictions are contemplating this path. But does it, as a matter of GHG emissions or water or material conservation, make sense to turn LEED into a legal *obligation*? The answer to this question is more revealing than it may seem. Indeed, it is emblematic of our age and our political discourse’s wider collapse on the language of obligation where complex public problems are concerned.

For neoclassical economics, the genius of local authority to legislate legal obligations (if there is any) is the relative ease with which people can opt out of *unwanted* legal obligations by moving. In theory, we can find the mix of public services and restrictions on our autonomy that we prefer and locate to that district which suits us best.¹⁴² A diversity of public duties, goods, and services provides a market of sorts and the comparatively lower transaction costs at this scale make the ‘right of exit’ more

MCDONOUGH & MICHAEL BRAUNGART, *CRADLE TO CRADLE: REMAKING THE WAY WE MAKE THINGS* (2002).

¹⁴⁰ See, e.g., Patrick Hoge, *S.F. Joins the Green Trend*, S.F. CHRON., Feb. 4, 2007, at A1 (“San Francisco is aiming to become one of the nation’s first large cities to require that new, privately developed buildings meet [LEED standards].”).

¹⁴¹ See *supra* note 132 and accompanying text.

¹⁴² See, e.g., Charles M. Tiebout, *A Pure Theory of Local Expenditures*, 64 J. POL. ECON. 416 (1956); VINCENT OSTROM ET AL., *LOCAL GOVERNMENT IN THE UNITED STATES* (1988); WILLIAM A. FISCHEL, *THE HOMEVOTER HYPOTHESIS: HOW HOME VALUES INFLUENCE LOCAL GOVERNMENT TAXATION, SCHOOL FINANCE, AND LAND USE POLICIES* (2001).

potent than a similar right vis-à-vis larger jurisdictions. There is another reason for a diversity of legislative jurisdictions, though. An experimentalist model of our liberal constitutional order views any one of these baskets of public judgments as an exemplar comparable to other, similarly situated jurisdictions. It views the locality's interaction with its residents and environment as information to be collected and integrated into whatever process/authority may be employed to synthesize collective action at broader scales.¹⁴³ Pooling such comparisons and making data on them widely available has the potential to enhance both democratic and market freedoms.

Now it must be said that there are sharp legal conflicts on the horizon for most any community that adopts LEED standards and almost certainly for any community that adopts them as legally binding within its jurisdiction. Lobbies like NAHB are working furiously to block exactly that move. And those wishing to avoid or cancel a locality's legal rules have options besides leaving.¹⁴⁴ It is no exaggeration to say that the existence of local legal authority is virtually *always* contestable.¹⁴⁵ Our municipalities trace their legal origins to private corporate entities¹⁴⁶ and the judicial scrutiny their sovereign actions attract is usually searching. Land use may be the exception, but ought the

¹⁴³ See Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267 (1998); ROBERT WESTBROOK, JOHN DEWEY AND AMERICAN DEMOCRACY (1991).

¹⁴⁴ So-called "home rule" grants to municipalities and counties usually contain a variety of express and implicit limitations. See OSBORNE M. REYNOLDS, JR., LOCAL GOVERNMENT LAW 105-37 (2d ed. 2001). Preemption is the other trump that has expanded at the hands of sophisticated counsel. See, e.g., *Voss v. Lundvall Bros., Inc.*, 830 P.2d 1061 (Colo. 1992); *Goodell v. Humboldt County*, 575 N.W.2d 486 (Iowa 1998). Indeed, even where home rule authority is express, courts have implied limitations on local legislative authority when it invades certain common law precincts or certain "civil relationships." See Gary T. Schwartz, *The Logic of Home Rule and the Private Law Exception*, 20 U.C.L.A.L. REV. 671 (1973).

¹⁴⁵ See Colburn, *supra* note 46, at 986-91.

¹⁴⁶ See *generally* HENDRIK HARTOG, PUBLIC PROPERTY AND PRIVATE POWER: THE CORPORATION OF THE CITY OF NEW YORK IN AMERICAN LAW, 1730-1870 (1983); Joan C. Williams, *The Invention of the Municipal Corporation: A Case Study in Legal Change*, 34 AM. U.L. REV. 369 (1984).

principles of solidarity and subsidiarity play some role in deciding whether to mandate green building standards?

Let us return to the original question: are these principles justified in practical (secular) reason? The philosopher Joseph Raz has given the most successful analysis of binding norms and practical reason.¹⁴⁷ Raz argued that a norm with the force of law functions as what he called an “exclusionary” reason—a reason for action whose function is to block practical reason within its scope. Intuitively, when we confront reasons for action that conflict, we try to weigh them against each other.¹⁴⁸ One ought always do whatever one has any *conclusive* reason for doing on the balance of reasons.¹⁴⁹ We are, though, better and worse at such judgments as individuals. Raz set legal rules up as exclusionary reasons, as a kind of second-order reason, in exactly this connection. Rules are a means of confining the weighing and comparing of first-order reasons.¹⁵⁰ However, Raz (like other positivists) linked the force of law behind rules to their *sources*¹⁵¹ and our principles of solidarity and subsidiarity do not really *have* an authoritative source for non-Catholics. They certainly are not law. So should they be some other kind of second-order reason for action? In my view, the principles of solidarity and subsidiarity hold tremendous potential within the liberal constitutional tradition and the case study we have been sketching is as good as any for showing why. Section A situates these principles as elements of a philosophy of action in a world of unknown possibilities and consequences. Section B applies them to climate disruption and land use decisions here at home.

¹⁴⁷ See JOSEPH RAZ, PRACTICAL REASON AND NORMS (1975).

¹⁴⁸ RAZ, *supra* note 147, at 36.

¹⁴⁹ RAZ, *supra* note 147, at 36.

¹⁵⁰ RAZ, *supra* note 147, at 36.

¹⁵¹ See JOSEPH RAZ, THE AUTHORITY OF LAW: ESSAYS ON LAW AND MORALITY (1979) (hereafter RAZ, AUTHORITY).

A. An Epistemic Justification for the Principles of Solidarity and Subsidiarity

Alternative energy and the improved design of our built environments will only be supplied to fulfill a demand. Those with the means to make such demands are in a qualitatively different position from those who lack the means.¹⁵² From the outset we have allowed that there are two different kinds of these means: economic and political. Those of economic means can make their own demands for energy efficient buildings while citizens can combine to make the demands collectively through a political process of some kind. But how are these kinds really so different? If their differences consist in the types of *action* they entail, then there are surely more than two relevant kinds. One's labor is as important as her purchasing or voting choices. She should not just buy a green home; she should go work for a green firm.¹⁵³ Of course, doing that may deprive her of the means to demand the green home she wants. Legislating obligations can be just as ineffective, though, given the possibility of leakage: people within a jurisdiction *may* change their behavior to comply with their (local) legal obligations. But those same people may also just leave to avoid, or use the legal process to nullify, any unwanted

¹⁵² "[T]ypical code compliant building makes minimal efforts to address energy and water issues and totally ignores materials waste, impacts on the construction site and any other issue not specifically covered in the building codes." Montez & Olsen, *supra* note 133, at 29.

¹⁵³ Greening one's firm from within is another possibility. See *generally* DANIEL C. ESTY ET AL., GREEN TO GOLD (2006) (detailing changes in philosophy at General Electric, Coca Cola, Timberland, and other firms aiming to profit from being more environmentally conscious). American Electric Power voluntarily committed to building a commercially viable integrated gasification combined cycle generating plant, capable of generating 1,000 megawatts with less emitted CO₂, mercury, sulfur and less wasted energy than any of the co-generation plants currently operating. Jeffrey Ball & Rebecca Smith, *AEP Plans Biggest Power Plant Using Clean-Coal Technology*, WALL ST. J., Aug. 31, 2004, at A2. The "Carbon Disclosure Project" is a collaborative venture that traces and seeks to reduce GHG emissions by monitoring and information pooling among multinational corporations. See <http://www.cdproject.net/whatiscdp.asp>.

obligations.¹⁵⁴ If it is the balance of human behavior that must change—and climate disruption seems to make GHG emissions just such a problem—then legislating a (jurisdiction-specific) legal obligation into existence may end up being pointless.¹⁵⁵ This is the need for a philosophy of action in the real world: the inconsistencies and fallibilities of acts (collective and individual) are situational, not categorical. For the actor trying to identify inconsistencies or real trade-offs between possible actions, only practical reasoning can do so.

Now it is easy to rationalize pointless actions by discounting the possibilities of action.¹⁵⁶ It is much harder to know what to do when one sees real possibilities for one's agency. But lives are finite and people choosing in earnest which paths and actions to take inevitably confront opportunity costs and informational dilemmas. Rational actions are those that, on the balance of reasons, ought to be taken. But *knowing* the reasons for action, especially when we weigh the opportunity costs of our actions, and knowing how to balance correctly the reasons that conflict, can be the severest of all challenges—whatever one's expertise.¹⁵⁷ What people need above all is a strategy enabling them to act on the balance of reasons while avoiding the costs of having to *learn* all of those

¹⁵⁴ See supra notes 16-21, 123-25 and accompanying text.

¹⁵⁵ See supra notes 10-13 and accompanying text. Using legislatures to inform and change minds is a separate question. Local legislative processes exert real influence on local *social* norms and that can be a good and sufficient reason for this type of action. There is, however, no reason to disqualify locally created subsidies and/or other means of *encouraging* desired behavior (which do not engender the hostility and/or jurisdictional leakage mandatory obligations often do) from this educative dimension of legislative action. Indeed, the enactment of inducements may be more likely to succeed as educative means than will the enactment of prohibitions as coercive means, all things considered.

¹⁵⁶ A furious critique of modern environmentalism in America motivated in good part by this notion is made in NORDHAUS & SHELLINGER, supra note 5.

¹⁵⁷ There are two components to this challenge, one of which is informational. See generally George J. Stigler, *The Economics of Information*, 69 J. POL. ECON. 213 (1961); Peter Morgan & Richard Manning, *Optimal Search*, 53 ECONOMETRICA 923 (1985). The other component is analytical, though, and it implores us to collectivize our cognitive capacities by polyarchical means. See Dorf & Sabel, supra note 143, at 292-314.

reasons.¹⁵⁸ This is where the principles of solidarity and subsidiarity can do real work: by guiding action without having to govern it.

Rarely can we know in advance what scale of action is necessary to address problems like water and electricity supply or fossil fuel dependency and climate disruption. Rarely can we know how long it will take to achieve the right scales and to design the right solutions. But it takes individual agents to probe the boundaries of such problems, to determine the scales at which to propose and implement solutions in light of challenges like information costs and strategic action like “leakage.” It is this interim to which my interpretation of subsidiarity is aimed, the *interval of time* in which public problems are framed by those who perceive them. If collective action at full scale cannot be taken without the achievement of improbable heights of consensus—and climate disruption seems to be exactly this sort of problem¹⁵⁹—then it is perfectly reasonable to direct one’s labor, capital, and political voice toward the piecemeal actions that are possible today.¹⁶⁰ Section B unpacks this reasoning in the context of land use planning and greenhouse gas emissions.

¹⁵⁸ Increasingly, such strategies must do without face-to-face social engagement as a means of eliminating information costs. See, e.g., ROBERT D. PUTNAM, *BOWLING ALONE* (2000). On the other hand, the costs of impersonal cooperation are falling. See YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* 3-5 (2006).

¹⁵⁹ See *supra* notes 22-24 and accompanying text.

¹⁶⁰ As it turns out, most successful life cycle analyses to date have been place-based and problem-oriented. See MCDONOUGH & BRAUNGART, *supra* note 139, at 118-56. The use of “bioremediation” for water and sewage systems that operate locally, are based on local materials, local energy and matter flows, and the local retention of nutrients, has proven revolutionary in many ways. *Id.* at 125-27.

B. A Justification for Piecemeal Actions Against the Biggest Public Problems

If any public problems call for broad scale collective action, climate disruption and our dependence on fossil fuels do. It is the *achievement* that collective action broad enough to solve such problems represents which justifies subsidiarity, though.¹⁶¹ Such achievements are inherently provisional, inherently contingent upon a myriad of preliminary, supporting steps. The philosopher's objection that collective action *always* has more purchase than personal action on such problems is precisely the kind of false dichotomy that we are right to avoid.¹⁶² Scaling our objectives is a process, often long, contentious, and fused directly to our beliefs about substantive justice. Rarely can we know either our means or our ends in isolation from the other. This is precisely what commends strategies limiting the search for solutions to a perceived problem, at least initially, notwithstanding the intuition on casting one's nets broadly.¹⁶³ Of course, it is more rational still to subject *all* of one's beliefs to the continuing scrutiny of experience.¹⁶⁴ If one works to build a green home, the minor GHG savings alone might not justify the effort. But this is not why it was the wrong choice. It is reason to go further still.

Scale is neither natural nor cultural; it is perceptual. On fossil fuel dependency and water and energy waste, for example, a golden rule of using less and conserving

¹⁶¹ Professor Waldron has labeled this the *dignity* of legislation as action-in-concert. See JEREMY WALDRON, *THE DIGNITY OF LEGISLATION* (1999). "Action-in-concert is not easy, particularly once people have a sense of themselves as individuals and of the ways in which acting with others might conflict with smaller scale projects of their own. In fact, when it actually takes place, action-in-concert is something of an achievement in human life." *Id.* at 156-57.

¹⁶² See *supra* note 50 and accompanying text. In other writings Goodin himself seems to recognize this, having argued that the pursuit of supposedly good ends through normal politics, especially when motivated by morality, has too often gone badly wrong. See ROBERT E. GOODIN, *MOTIVATING POLITICAL MORALITY* (1992) (hereafter GOODIN, "POLITICAL MORALITY").

¹⁶³ See Morgan & Manning, *supra* note 157, at 939.

¹⁶⁴ "Adaptive managers emphasize experimentalism, taking actions capable of reducing uncertainty in the future." NORTON, *supra* note 40, at 92.

more is obviously the first-best—and just as obviously the most unlikely—solution.¹⁶⁵ In China and India we are witnessing the most colossal urbanization of human history.¹⁶⁶ It is a process that promises to improve the quality of billions of lives. Persuasion and influence being as imperfect as they are, though, there seems little point in trying to stop it by defending peasantry as a way of life. Somehow, we must help people on the other side of the Earth urbanize without repeating our mistakes.¹⁶⁷ And we must communicate, not just negotiate, to do so.

In matching measures with the agents and jurisdiction(s) taking them, subsidiarity offers to mediate between the types of actions worth taking and the persons contemplating them. Subsidiarity in this sense is an epistemic principle of agency—an ethic—that offers to economize on relevant information and to maximize the probabilities of right action. Climate disruption and its relationship to fossil fuels is a good example. How should our voter/consumer/laborer prioritize her work? Right now it is impossible to know how best to reduce GHG emissions in the world as it is. We confront obstacle upon obstacle—some of which are strewn across the planet—in seeking to reduce GHG emissions in a way relevant to climate disruption. We cannot know, *a priori*, who will cooperate and when.¹⁶⁸ But for using less energy, we have no assurance that we will not

¹⁶⁵ Even assuming unanimity on the proposition that fossil fuel usage is destructive, “mutual coercion, mutually agreed upon” could still be unattainable. Individually negligible harms can be outweighed by their utility to the actors, like the smoker who (rationally) prefers the next cigarette *and* quitting smoking. See Chrisoula Andreou, *Environmental Damage and the Puzzle of the Self-Torturer*, 34 PHIL. & PUB. AFFS. 95 (2006).

¹⁶⁶ Global rates of urbanization rose noticeably in the 1990s. The UN now projects that, by 2025, more than five billion people, or about 70% of humanity, will live in urbanized areas. See William E. Rees, *The Built Environment and the Ecosphere: A Global Perspective*, 27 BLDNG. RES. & INFORM. 206, 210 (1999).

¹⁶⁷ See *supra* notes 15-16 and accompanying text.

¹⁶⁸ “Strategic behavior arises when two or more individuals interact and each individual’s decision turns on what that individual expects the others to do.” BAIRD ET AL., *supra* note 83,

just soften energy prices and allow someone else to use more. If we just work for the creation of collective caps on use, we must trust that others will share our optimism and presume (with us) the efficacy of whatever scales our cooperative collective action reaches.¹⁶⁹ Yet there seems no real reason to do one *or* the other. Indeed, if anything, spreading one's investments is probably the dominant strategy and selecting measures that will generate information if nothing else is the best way to do that.¹⁷⁰ This is subsidiarity and solidarity: the experimentalist recourse to more modest options first, the use of persuasive over coercive means that treat others as potential partners and not as objects, and the collection of data from whole experience revealing optimal solutions or, barring that, suboptimal solutions that are *acceptable* to all.¹⁷¹ That strategy could also answer the philosopher Ronald Dworkin's worry mentioned at the outset¹⁷²: the United States has thus far lacked both consensus *and* a healthy culture of argument on climate

at 1. Its prevalence is both a cause of and a challenge to governance of collective enterprises. See *generally* KENNETH J. ARROW, *THE LIMITS OF ORGANIZATION* (1974).

¹⁶⁹ This is risky because of the possibility of what are often called *intransitive* preferences. "One's preferences are transitive if they satisfy the following condition: for all x, y, and z, if one prefers x to y, and y to z, then one also prefers x to z." Andreou, *supra* note 165, at 102-03. But with actions like air pollution, preferences do not necessarily satisfy this condition because "in cases where damage results from the accumulation of individually negligible effects, it is tempting to stick to a destructive course even when things have become very bad. For, even then, individual indulgences remain negligible in terms of making things worse." *Id.* at 105.

¹⁷⁰ *Cf.* NORTON, *supra* note 40, at 113 ("Pragmatism works because it simply encourages us to develop methods that have always worked, to seek truth by pooling the community's experiences. . . . The strength of the community is precisely in its diversity of opinion and belief systems.").

¹⁷¹ See NORTON, *supra* note 40, at 105-13. Whatever the level of government, there is no shortage of experience where legislated legal obligations to conserve have provoked as much or more conflict as they have conservation. See Jamison E. Colburn, *Habitat and Humanity: Public Lands Law in the Age of Ecology*, 39 ARIZ. ST. L.J. 145 (2007). Smaller mistakes are more corrigible, though, and, if made in parallel, more readily avoided by the pooling of experiences. Finally, at a very practical level, the pervasive judicial skepticism of local legal authority like that displayed in *Early Estates, Inc. v. City of Providence*, 174 A.2d 117 (R.I. 1961), see *supra* notes 118-26 and accompanying text, blunts the point of turning market-shaping performance standards like LEED into legal obligations.

¹⁷² See *supra* note 6 and accompanying text.

disruption. Scaling those arguments down to manageably sized debates about land use, the plasticity of private preferences that interact with public subsidies, and the nurturing of social values at a community level, creates a vastly more numerous sample size and thus a higher probability of real deliberation. It makes less sense, in short, to seek the enactment of broad scale, stringent legal rules—for now.¹⁷³ The opportunity costs of negotiating coercive duties in matters so complex too often outweigh their potential utilities, even under optimistic assumptions about compliance. Many cities and towns across America are engaged in the directly deliberative work that they are—reinventing transport, construction, and land use—for exactly this reason.¹⁷⁴ Indeed, solidarity and subsidiarity as applied ethics illustrate how liberalism’s public/private divide is actually lived today: hardly at all. Where does one’s agency as citizen stop and that as consumer or laborer begin? Should one build a LEED home or work to enable neighbors to use LEED standards in building their home? As purely means/ends propositions, no one-dimensional plan is rational by itself and only some separate principle of priority can arbitrate which ought to come first. Yet, even combined such actions are not as completely rational as they would be if accompanied by yet a further act of solidarity helping to reduce GHG emissions in places like China and India.

To be sure, solidarity and subsidiarity just as surely reject the work of lobbies like NAHB who seek to preempt experimentalism wholesale.¹⁷⁵ Centralized actors are assuredly every bit as duty bound to support experimentation and the dissemination of its

¹⁷³ Cf. BOHMAN, *supra* note 6, at 237 (“Deliberative democracy places great demands on both ordinary citizens and political institutions. For this reason, many of its critics have argued that deliberative democracy is an unworkable ideal under any circumstances, indeed one that accentuates all the typically mentioned weaknesses of democracy.”).

¹⁷⁴ See *generally* Nolon & Bacher, *supra* note 79.

¹⁷⁵ See *supra* notes 127-33 and accompanying text.

results under our circumstances as they are to forego preempting it.¹⁷⁶ It is in this sense that acting locally is how to fulfill one's obligations to do and to seek justice while real dilemmas of scale are resolved empirically. That kind of pragmatism is probably uniquely American.

[I]f by the bettering of social relations we mean the realization of liberal values, especially effective freedom to participate in and contribute to social action, then Dewey was prepared to concede that true participatory democracy could not be established until the social and human sciences had evolved into practical sciences whose research into the material of human nature could be fruitfully applied to the education and training of an intelligent, cooperative community.¹⁷⁷

The human sciences, in other words, must be real ingredients of political action before any applied ethics have much chance of enabling us to do the right thing.

My point is not to deny the necessity of long-term planning or broad scale action. But the "temporal order," as Catholicism calls it, is finite by nature and doing nothing but trying to eliminate uncertainty or build consensus is too often indistinguishable from procrastination. Planning out our actions in concert with others is best segmented and carried out modestly precisely because of our institutional, legal, and moral diversities.¹⁷⁸

* * *

Mahatma Gandhi taught that we should be the change we wish to see in the world.

But Gandhi understood better than most the complications of changing behaviors.

¹⁷⁶ Cf. WELCHMAN, supra note 42, at 186-99 (revealing the affinities for justice within Dewey's ethical thought and showing that Dewey expected expertise and leadership to shape community development). Professor Buzbee has made the most thorough case against broad preemption regarding risk regulation, including that of GHGs. See William W. Buzbee, *Asymmetrical Regulation: Risk, Preemption, and the Floor/Ceiling Debate*, 82 N.Y.U.L. REV. 1547, 1616-19 (2007). The one sure role for super-ordinate action is divulging whatever unfair advantages subsidiary actors may be deriving from self-regarding, solidarity-diminishing behaviors. Those who prosper at the expense of the common good are certainly due less from others.

¹⁷⁷ WELCHMAN, supra note 42, at 207.

¹⁷⁸ See Daniel C. Esty, *Environmental Protection in the Information Age*, 79 N.Y.U.L. REV. 115, 146-48 (2004).

Gandhi . . . was approached one day by a woman who was deeply concerned that her son ate too much sugar. “I am worried about his health,” she said. “He respects you very much. Would you be willing to tell him about its harmful effects and suggest he stop eating it?” After reflecting on the request, Gandhi told the woman that he would do as she requested, but asked that she bring her son back in two weeks, no sooner. In two weeks, when the boy and his mother returned, Gandhi spoke with him and suggested that he stop eating sugar. When the boy complied with Gandhi’s suggestion, his mother thanked Gandhi extravagantly—but asked him why he had insisted on the two-week interval. “Because,” he replied, “I needed the two weeks to stop eating sugar myself.”¹⁷⁹

The scales at which we take our actions against GHGs need not limit the horizons of our moral, political, and economic agency, though. Acting locally does not entail *lococentrism*, especially with a problem like climate disruption. Rapid urbanization in India and China is generating environmental costs of unprecedented proportions while it creates the next generation of energy-hungry communities. As cities and towns here tackle the problems of urbanization while at the same time reducing land, energy, water, and material waste, they are *experimenting as communities*. Who is collecting and sharing their experiences? To be sure, the steps they take toward conservation will necessarily allow any top-down measures ultimately proposed to address behavioral changes of smaller magnitudes. But it is the wide sharing of their learning, especially abroad, that could be truly transformative.¹⁸⁰ Which legal innovations actually induce economic activity to leak out to other jurisdictions?¹⁸¹ Which design enhancements actually induce longer-term use of substandard products?¹⁸² How are preferences born of wealth—preferences once viewed as “needs”—transformed into “wants” and, eventually,

¹⁷⁹ AL GORE, *EARTH IN THE BALANCE: ECOLOGY AND THE HUMAN SPIRIT* 14 (1992).

¹⁸⁰ Cf. GOODIN, *POLITICAL MORALITY*, *supra* note 162, at 153 (“In a world characterized by widespread tit-for-tat retaliation—in an arms race or a trade war or an extensive electorate, for example—you do unto others as you would have them do unto you, precisely because they will do unto you as you have done unto them.”). The costs and barriers to this kind of sharing are dropping rapidly. See *generally* BENKLER, *supra* note 158.

¹⁸¹ See *supra* notes 18-21 and accompanying text.

¹⁸² See *supra* notes 105-10 and accompanying text.

into the trivial proclivities that evaporate under pressure?¹⁸³ Will an “alternative” combustion source actually reduce carbon emissions?¹⁸⁴ These are the epistemic opportunities of subsidiarity and solidarity: one leverages the other into a whole greater than their sum as parts. People who take small steps toward the good are almost never precluded from scaling their successes up and out. Indeed, it is no exaggeration to say that communicating lessons learned on small scales to aid those facing our quandaries is ethical conduct in every possible world. We have no time to waste, though. Virtually every mistake is eventually irreversible.

¹⁸³ See supra note 49 and accompanying text.

¹⁸⁴ See supra note 85 and accompanying text.