In the invitation to this Symposium on Reconceptualizing the Future of Environmental Law, the organizers explained that the Symposium “focuses on the continued expansion of environmental law into distinct areas of the law, requiring an increasingly multidisciplinary approach beyond that of traditional federal regulation.” In short, the question posed is about the future proliferation of environmental measures outside the previous domains of federal environmental statutes.

At the risk of being guilty of local parochialism, I would like to discuss how the future described by the organizers has already arrived in California—both in the sense that a great deal is happening outside the purview of “federal statutes,” and that much of it involves “distinct areas of law” other than traditional environmental regulation. My focus will be on the issue of climate change, where California has been particularly active.

Not all of California’s efforts have been met with approval, even from observers who are highly sympathetic to the goals. Some influential environmental scholars have debated whether California might have done better to simply set a price on carbon and avoid further regulatory apparatus, either by traditional...
regulators or elsewhere. I will use this debate to discuss some of the costs and benefits of mainstreaming environmental law into areas outside of the traditional environmental statutes.

Part I will address California’s broad portfolio of climate measures. These measures certainly fit the organizer’s description: none of them are federal, but many are implemented by parts of the state government other than environmental agencies, and some reach forms of conduct well outside traditional environmental regulation. Part II will ask whether the breadth of this regulatory portfolio is really desirable: would we be better off to stick to a simple direct attack on carbon emissions? Using so many different tools may simply be an unnecessary complication, if not counterproductive. But a broad portfolio might also be more effective in some ways.

I. CALIFORNIA’S MULTIDIMENSIONAL CLIMATE CHANGE LAW

In California, efforts focusing specifically on climate change can be traced back to 1988, when a law required the first inventory of in-state greenhouse gas emissions.2 Since then, California has continued to pursue a wide range of policies to reduce greenhouse gas emissions. In 2006, Governor Schwarzenegger signed into law the capstone of the State’s climate policy, the California Global Warming Solutions Act of 2006, or Assembly Bill 32 (AB 32).3 AB 32 sets a binding greenhouse gas emissions target, requiring California to reduce emissions to the 1990 level by 2020, and to make deeper reductions by 2050.4 This law generated world-wide attention, including a statement by the British Prime Minister that its signing represented a “historic day for the rest of the world as well.”5 The Prime Minister and

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5. Id. at 10654 (citations omitted).
the Governor of California also entered into an agreement to share best practices on market-based systems and to cooperate to investigate new technologies; similar agreements now exist between California and states and provinces in Australia and Canada. In the November 2010 elections, a ballot initiative to suspend indefinitely the operation of AB 32 was soundly defeated, with sixty-one percent of Californians voting to keep AB 32 in effect. The vote showed that there is significant grassroots support for climate change legislation, at least in California.

In implementing AB 32, the California State Air Resources Board quickly developed nine “discrete early action greenhouse gas emission reduction measures” designed to go into effect before the trading system is implemented. Four of these actions focus on reducing emissions of high global warming potential (GWP) gases, which are gases whose impact on the climate is hundreds or thousands of times greater than that of carbon dioxide. The most significant of the early action items, however, was establishing a low-carbon fuel standard, per Executive Order S-01-07, to reduce the greenhouse gas intensity of transportation fuels by ten percent by 2020. The low carbon fuel standard (LCFS) also allows suppliers to generate credits for exceeding the reduction required for that year, creating the opportunity for a trading market in credits among suppliers.

Other early-action items provide some indication of how California has gone beyond the traditional approach in which an environmental agency imposes restrictions on a large industrial source. Some of the most notable early-action items include

6. Chemerinsky, supra note 4, at 10659.
8. CAL. HEALTH & SAFETY CODE § 38560.5(a)-(b) (West 2010).
11. Id. at 53-54.
increasing the capture of methane from landfills,12 creating a tire pressure program that allows owners of vehicles to properly maintain their tire pressure,13 and reducing diesel emissions from ports by providing electricity to berthed ships.14

Even more notable than these early action items, of course, is the later establishment of California’s cap-and-trade program, which sets a declining, statewide cap on greenhouse gas emissions15 and covers about six hundred industrial facilities.16 But, AB 32 is much more than the trading system supervised by the California Air Resources Board. Indeed, a government list of agencies implementing AB 32 includes the Business, Consumer Services and Housing Agency, the California Department of Public Health, the Office of Emergency Services, the California Transportation Agency, the California Energy Commission, the California Department of Food and Agriculture, and the California Public Utilities Commission.17

The California Public Utilities Commission (CPUC) has been particularly active. The CPUC has had an extensive energy efficiency program since the 1970s.18 The CPUC also has a very

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ambitious Renewables Portfolio Standard, under a series of three State laws, resulting in about a twenty-three percent use of renewables by the State’s largest private utilities.\textsuperscript{19} The 2020 target established by the legislature is thirty-three percent.\textsuperscript{20}

The California Environmental Quality Act (CEQA) also mandates consideration of climate change.\textsuperscript{21} Like federal law, CEQA mandates preparation of environmental assessments; but unlike federal law, it also imposes a duty to mitigate environmental impacts.\textsuperscript{22} Given that the statute applies not only to state government, but also to local government, the result is to embed environmental considerations into a wide range of government actions, such as urban planning.

This is only a superficial look at California’s efforts, but it is enough to make two points. First, in terms of whether environmental law has moved beyond federal statutes (or state actions under the aegis of federal law), the answer is obviously yes. California has been a very active player in climate change and began well before any significant federal involvement. Second, California has moved well beyond the classic regulations of emitters that are the traditional staple of environmental law. Rather, California has unleashed a barrage of different measures involving many different aspects of life and many different kinds


\footnotesize{\textsuperscript{22} See, e.g., City of Marina v. Bd. of Trs. of Cal. State Univ., 138 P.3d 692, 696 (Cal. 2006); Woodward Park Homeowners Ass’n v. City of Fresno, 58 Cal. Rptr. 3d 102, 132 (Cal. Ct. App. 2007).}
of government agencies, covering everything from tire inflation by automobile owners to land use planning and utility regulation.

Thus, the expansion of environmental law beyond the traditional borders of federal environmental regulation is already well underway in California. Still, one might ask, is that expansion a good idea? Or does the future lie elsewhere?

II. SHOULD WE CUT THE GORDIAN KNOT?

Perhaps the Californian approach is too complicated and overworked. Ann Carlson explored the case for a simpler, more direct approach in a 2012 article.23 Her basic thesis is simply put:

If the government enacts a cap-and-trade scheme—but independently regulates through complementary policies a significant percentage of the emissions that would otherwise be subject to cap-and-trade—the opportunities for reductions of emissions covered by cap-and-trade will be reduced. Moreover the emissions reductions occurring because of complementary policies may be more expensive than reductions a cap-and-trade scheme would produce independently—the point of cap-and-trade is to find the cheapest cost reductions, and those may be different reductions than the ones required by complementary policies.24

It would be an oversimplification to say Carlson is merely opposed to complementary measures. She suggests that renewable portfolio standards are unlikely to be desirable unless the cap-and-trade program is defective.25 But she sees more promise in energy efficiency programs given the evidence that consumers fail to make rational choices in that sphere.26

A stronger version of the Carlson thesis—stronger than Carlson herself would endorse—would simply be that if we get

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24. Id. at 210.
25. Id. at 231-40.
26. Id. at 240-48.
prices right, everything else will take care of itself. There is no need to worry about dictating energy sources to utilities or consumers, fostering public transportation, or making the urban footprint less sprawling. Price signals will reverberate through the economic system, making renewable energy and energy efficiency more appealing, giving people an incentive to live in more centrally located housing in order to cut commuting costs, and making public transit a more attractive option compared with cars.

Two other California environmental scholars, Holly Doremus and Michael Hanemann, take a rather different view. Although they view cap-and-trade as a useful tool, they argue that much more must be done. In their opinion, appliance efficiency measures, building codes, and land use planning decisions are also needed, because price signals are too attenuated to change individual behavior, and because at least some of the necessary changes require collective decisions. For instance, they explain:

Home builders and buyers are responsible at some level for the global-warming effects of home design and subdivision layout, but buyers may have few choices; and builders are unlikely to be large direct emitters, may be constrained by local zoning, and may not be around long enough for the outcomes of their decisions to become apparent.

Still other emissions are poor candidates for trading because the accounting is difficult. For example, agricultural practices other than fuel consumption are responsible for about 6% of U.S. GHG emissions. . . . Since these activities occur in the open air and do not involve fuel inputs which can be used as convenient proxies, their emissions cannot be monitored with the precision required for optimal trading markets.

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29. Id.
The difference between these two viewpoints should not be exaggerated: both sides believe that cap-and-trade is an important part of climate policy, but neither thinks it is entirely sufficient. They also seem to agree that it is not enough to simply impose numerical limits on carbon emissions by industry. But the emphases are quite different.

The argument for relying on price signals is simple. Market economies work by using price signals to coordinate behavior across space, time, and multiple actors, rather than attempting to use legal directives to make the market work. The more we see climate change as a multidimensional problem, the more appealing it becomes to use a simple price signal to deal with all the dimensions at once.

The scholars discussed above would all agree on the usefulness of these price signals, but their work points to several limitations on their effectiveness. First, we might not get the price right, either because it is deliberately set below the optimum level for political reasons or because of defects in the trading system. Second, some kinds of sources may be too difficult to monitor for inclusion in the system. Third, there could be collective action problems in the response of individuals or communities to price changes. Fourth, human beings are fallible and may not respond with perfect rationality to price signals. The last three objections are not unrelated to the price level: a high enough price may create enough motivation to find ways to reduce emissions despite the obstacles. But the price may not be high enough to have this effect.

The difficulty of being sure of the scope of these exceptions argues for flexibility and local experimentation. Some of California’s emphasis on complementary measures may well have been due to doubts about how well an as-yet-untested trading system would work. If the system works out well, the need for some of the complementary measures may diminish. On the other hand, experience may also show that even more vigorous complementary measures are needed because trading systems simply have too little impact on individual behavior—or for that matter, on organizational behavior.
To quickly sum up, this Symposium is about a vision of the future of environmental law, one where environmental law has overflowed the banks of the traditional EPA regulation. We saw in Part I that this version of the future is already in full force in California, as indicated by the multidimensional measures, involving many different parts of government, undertaken to address climate change. In Part II, we considered whether market instruments might provide a much simpler approach to addressing climate change and, by implication, other environmental problems. It seems clear that market instruments are not sufficient by themselves, but it is less clear just how much supplementation is required. The efforts of California and other jurisdictions should provide useful information about the right balance between market instruments and complementary measures. But we will not know the answer for some time.

The title to this short essay asks whether, in terms of the issues involved in this symposium, California should be considered a model for the future or an object lesson to be avoided. The answer, no doubt, will turn out to be “both.” That is the nature of all efforts to tackle intractable problems: they get some things right the first time, but not others.