

RESEARCH

Is Anyone Listening as Climate Change Speeds Up?

The most ambitious example to date of regional planning related to climate change is playing out in California. But it's largely unnoticed outside the state, as headlines are taken over by the national economy and foreign policy. This is happening in a year that has seen more extreme weather events than any period on record, with flooding in the East, drought and wildfires in the Southwest, and killer tornados seemingly everywhere. If sea-level rise continues, as it is sure to do, in a few decades we will see storm surges from moderate hurricanes inundating land up to 90 miles from the shore.

Everyone agrees that this global problem is best tackled at the federal level. But the Obama administration is silent on the issue of new legislation, once a top campaign priority. My wife, who works for a federal agency, tells me that employees are not even allowed to use the term "climate mitigation" as they prepare for the worst.

It's up to the states and localities to fill the leadership void. That brings us back to California, which five years ago became the first state to issue an executive order

setting greenhouse gas emission reduction targets. It was also the first state to pass a comprehensive climate action planning act (AB 32, Global Warming Solutions Act of 2006). Two years later, another first: a regional planning act aimed at climate mitigation (SB 375, Sustainable Communities and Climate Protection Act of 2008). And the state keeps moving forward, according to a legislatively mandated timetable.

SB 375 requires the California Air Resources Board to establish targets for reducing GHG emissions in each region covered by the state's 18 metropolitan planning organizations. The MPOs must develop "sustainable communities strategies" that will help regions to meet those targets. It will be up to the board to evaluate the effectiveness of these strategies for each region.

It took a long time, and much collaborative planning (by the CARB, the MPOs, and the state-appointed Regional Targets Advisory Board). But now the targets are set and the MPOs are beginning to submit their strategies.

One of the strategies is somewhat controversial. A National Academy of Sciences study concluded that compact development would likely reduce carbon emissions

by only a couple of percentage points. Our far more optimistic assessment in the 2007 book *Growing Cooler* was six times higher. (I also took issue with the study's conclusion in my December 2009 column, "Top Thinkers vs. Top Academics.")

The accompanying table shows early returns from SB 375 in the form of CO₂ reduction targets set by the air resources board in consultation with the state's MPOs. For the San Diego region, the MPO and CARB agreed on a target reduction of seven percent per capita by 2020 (relative to 2005 levels). By 2035, San Diego's target is a 13 percent CO₂ per capita reduction. Adding it all up, CARB estimates that the statewide reduction possible with compact development would be 3.4 million metric tons of CO₂ by 2020 (well above the board's original estimate) and 15.1 MMT by 2035.

Is this "social engineering," as some critics would say? Hardly. A recent survey by the National Association of Realtors indicates that 71 percent of Californians want access to transit options, and surveys by the Public Policy Institute of California show that a third to a half of Californians would willingly trade long commutes for shorter commutes and transit options, even if it meant living on smaller lots. My University of Utah planning colleague Arthur C. Nelson, FAICP, predicts high demand for new housing in California's four largest MPOs (the first four listed in the accompanying chart) within a half-mile of existing and planned transit stations. And Nelson's work shows that California is not alone: The market for transit options in most major metropolitan areas already exceeds supply and the disparity seems to be growing.

The news from California shows what can be achieved by regional planning in the campaign to mitigate the effects of climate change—a battle that will likely be fought without much help from the federal government.

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Approved Regional Greenhouse Gas Emission Reduction Targets

MPO Region	Targets	
	2020	2035
Southern California Association of Governments	-8	-13
Metropolitan Transportation Commission	-7	-15
San Diego Association of Governments	-7	-13
Sacramento Area Council of Governments	-7	-16
San Joaquin Valley MPOs (there are 8)	-5	-10
6 Other MPOs:		
Tahoe	-7	-5
Shasta	0	0
Butte	+1	+1
San Luis Obispo	-8	-8
Santa Barbara	0	0
Monterey Bay	0	-5

California Air Resources Board (http://www.arb.ca.gov/cr/sb375/final_targets.pdf)

Courtesy Reid Ewing

Targets are expressed as percent change in per capital greenhouse gas emissions relative to 2005.