

# Counting carbon footprints

by Peter Seidman | Posted: Thursday, January 10, 2013 12:00 pm



There's a new link in the sustainability chain in Marin.

Resilient Neighborhoods has just completed a pilot program that sought to engage households in taking responsibility for reducing their carbon footprints.

Tamra Peters, who serves on the board of Sustainable Marin, started thinking about connecting residents in a low-carbon community about three years ago. "I had been wanting to do something about climate change," she says, "and I was very interested in emergency preparedness." Connecting the goals of carbon reduction and increased emergency preparedness intrigued her. In Palo Alto some years ago, people were distributing information about ways to protect the environment. Another group of people were distributing information about emergency preparedness. "I linked the two in my mind."

About 20 years ago, Peters worked with David Gershon, who in 2006 came out with a book titled *Low Carbon Diet: A 30-day program to lose 5,000 pounds*. In carbon consumption that is. Peters used the low carbon diet as the basis for the Resilient Neighborhoods goal of reducing carbon emissions.

She created the emergency preparedness component for Resilient Neighborhoods working with the city of San Rafael emergency preparedness office. She and people on her Resilient Neighborhoods team worked on a third component: supporting a local low-carbon economy, one aimed at curbing consumption. Those three elements form the foundation of Resilient Neighborhoods.

About a year ago, Resilient Neighborhoods embarked on a pilot project that sought to engage groups of five to seven Marin households in a grassroots effort to curb carbon emissions. In the program, the households formed eco teams that met five times over about two months. The goal was to follow a carbon-reducing diet to curb household carbon emissions by 500,000 pounds in a year. Staff from Resilient Neighborhoods attended each meeting to provide information about ways to reduce emissions, build a local low-carbon economy and connect neighbors to create communities that could meet emergencies.

"The goal was to get 100 households," says Peters. In the latest update of its newsletter, the December issue, which came out about one year after the start of the pilot program, Resilient Neighborhoods listed 90 households formed into eco teams and 18 in the process of forming. The neighborhood carbon-reduction model, which relies on individual responsibility rather than government intervention, far surpassed the carbon-reduction goal. As of December, the eco team households had reduced their carbon consumption by 1,063,363 pounds. Peters says the reductions are quantifiable based on work done in Portland in connection with the EPA, which determined how many pounds of

carbon a specific action would reduce: doing larger but fewer laundry loads, for example.

By the end of the pilot program, Resilient Neighborhoods had eco teams in Sausalito, San Anselmo, Mill Valley, Larkspur, Fairfax, Novato and San Rafael, which has written the Resilient Neighborhoods program into the sustainability element of its general plan. San Rafael as well as Sustainable Marin and Dominican University have sponsored the effort. So has Emergency Upgrade California, the state's energy efficiency program.

Resilient Neighborhoods got a nod from the business community with an eco team at Autodesk, which strategized during lunch hour. Drawing interest from virtually anywhere—businesses, congregations, the sustainability community or even just friends and neighbors connecting—highlights the philosophy of created community that lies at the heart of Resilient Neighborhoods.

In several key ways, the Resilient Neighborhoods strategy mirrors the Transition Towns movement. That got its start in a big way in Canada with the release of *The End of Suburbia*, a documentary that reached cult-like status. The film posits that when the world enters the era of peak oil, the suburban lifestyle that blossomed, some say exploded, in the second half of the 20th Century will self-destruct without a constantly expanding world supply of oil. In 2004, the film made its way to Kinsale Further Education College in Ireland. Students who saw it decided to take action. They founded the Transition Towns movement, and using classic community organizing tactics, the students began spreading the word that rather than relying on arthritic political systems, concerned citizens around the world should confront the related issues of peak oil and climate change in their own ways in their own communities.

By 2010, there were about 300 Transition Towns organizations around the world. Seventy-four of them were in this country, according to Transition United States, based in Sebastopol. That's a fairly hefty percentage of total transition groups, especially considering that Transition United States got started only in January 2009. In the North Bay, residents in Sebastopol and Cotati fired up their local Transition Towns groups. In Marin the idea also spread, including groups in West Marin, Mill Valley and other cities. Transition United States figures there are at least four significant (attempts) to mull it over for each official transition initiative.

The foundation of the transition movement rests on a core principal that unless people take actions in their own communities to decrease carbon consumption and increase self-reliant communities, the country and the world will sooner or later face catastrophe resulting from declining petroleum supplies and a degraded environment. Some call the philosophy alarmist, but adherents participate on a continuum. Outliers are closer to survivalists, but the more moderate participants, like Resilient Neighborhoods eco teams, believe that creating neighborhood communities where people know each other, exchange keys, look out for each other, can produce an organically bonded community that can withstand an emergency better by working together.

That kind of bonded community also can promote a new paradigm low-carbon community. As an example, says Peters, neighbors could go to a local hardware store and say that if the store stocks LED light bulbs, the neighbors will buy from that store. Promoting a low-carbon diet that creates a low-carbon local economy is inherent in the strategy.

In another example of a Transition Towns and Resilient Neighborhoods strategy to reduce consumption, West Marin started a tool library and a community garden to share resources in the community to obviate the need for outside supply.

While Transition Towns forms the philosophical foundation for a low-carbon diet and reduced consumption, Resilient Neighborhoods is like an action plan. The eco teams trade information and tips, and that kind of proliferation produces new ways to reduce consumption in a kind of viral chain reaction.

In 2006, the Empowerment Institute started to work on how cities and their residents could be persuaded to make cultural and economic changes to embrace what in a best-case scenario would be a carbon-neutral existence. The low carbon diet was born. It offers 24 actions to reduce a household's carbon footprint.

More than 300 "Cool Communities" have taken up the challenge in 36 states to achieve a 25-percent reduction in their carbon footprints. The Cool Community model has been replicated and adapted for China, Korea, Japan, Australia, Canada and the United Kingdom. But spreading word about a low-carbon diet is one thing; turning the concept into action is another.

In an explanation of the challenges associated with following the low-carbon path, Gershon writes, "But wide proliferation of these tools is not the same as effectively applying them. After several years of watching many cities dive into this behavior change and community engagement process with gusto, but fizzle out after they bumped up against the hard work and deep knowledge required to be effective, it became apparent we had gone a mile-wide and an inch deep.... We now needed to help communities skillfully deploy [low-carbon strategies] if we wished to realize the potential of a demand-side greenhouse gas reduction strategy."

That's exactly where Resilient Neighborhoods fits into the mix. "Resilient Neighborhoods is kind of a transition to Transition Towns," says Peters. Among the Transition Towns groups that have expressed interest in the Resilient Neighborhoods paradigm is the city of Sonoma.

That city also is one of the possible participants in the next stage of the low-carbon diet effort. Spurred in large part because of a commitment among Northern California cities to seek ways that can reduce carbon emissions as well as the state's commitment to reducing greenhouse gas emissions, the institute chose five candidate cities here.

The Empowerment Institute has identified five cities that it says have "demonstrated early adopter

credentials around taking climate action. The cities are Davis, Palo Alto, San Francisco, Sonoma and San Rafael. Three of the cities will be chosen to be part of a Cool City challenge. Among the goals of the challenge are engaging between 25 percent and 75 percent of households to reduce their carbon footprint by a minimum of 25 percent, with a minimum of 40 percent performing home energy retrofits. Also among the goals: developing a plan to transition to true carbon neutrality.

And echoing the economic goal at Resilient Neighborhoods, the institute has set its own target to "develop a low-carbon economic development strategy around increased residential demand generated by the campaign for low carbon goods and services, energy efficiency retrofits and renewable energy." The institute's challenge also mirrors the Resilient Neighborhoods model "to create block-based teams to increase individual and collective resiliency of residents in neighborhoods to address climate-related risks and enhance overall sustainability and livability."

Whenever the topic of taking individual actions to promote sustainability arises, critics pipe up and say individual actions are a small drop in a big bucket. "Our government leaders should be doing this," says Peters. "But they're not. And I have found in working in political campaigns that if people put their anger and frustration at not being able to affect [the big picture] into something that they can do," it can change behavior. "With citizens working in partnership with their local towns and governments that have climate change action plans, like the city of San Rafael, we can do it together. This is a model that empowers people to take action." It's a new chorus for the think globally, act locally refrain.

Just how much of an impact Resilient Neighborhoods has had with its pilot project is the subject of a study currently underway. Before the start of the pilot, in fall 2011, the organization distributed a survey to participants asking about their lives and habits, where they shopped, how politically active they were, how prepared for a disaster they were. One year later, after completion of the pilot, the organization is sending out a new survey to see what has changed in the behavior of participants. And as the new year gets underway, says Peters, Resilient Neighborhoods is re-working its informational material and seeking to start new eco teams.

The focus will remain the same regarding preparedness, carbon reduction and promoting a local low carbon economy. "We say that this is what you can do. These are the things that may happen," says Peters. "We need to be prepared for emergencies. Sea level is rising. When we have violent storms, there will be disruption of supplies here. We need to do what we can to bond with our neighbors, and we need to support our local businesses, because they are the ones who are going to be here. It's completely practical and pragmatic."

And when it comes to reducing carbon emissions in households, individual residents can in fact make a big difference by following the low-carbon diet. A 2007 study commissioned by the Marin County Community Development Agency found that Marin's ecological footprint was 27 acres per person. That's more than the country as a whole and more than double many industrialized European countries.

Energy use in buildings accounts for 44 percent of the county's total footprint.