

Features | October 13, 2008 | by Susan Kraemer

From Industrial Park to Zero-Carbon Town

[Sonoma Mountain Village](#) is one of only [five One Planet communities in the world](#). The village is in process of undergoing a transformation from 200-acre industrial park to eco community right near my own Northern California neighborhood.

Once the site became available for sale, the local, [environmentally active Coddington family](#) was the only bidder to offer a vision for its future development as a sustainable community. The eco-minded City of Rohnert Park jumped at the chance to give the Coddingtons the opportunity to turn their vision into reality.

"Transformation" only begins to describe the process. More accurately, the industrial park -- formerly the workplace of 2,500 Agilent workers before their jobs went overseas -- is being completely recycled. For example, every last acre of the current park's old parking lots will be crushed and re-used to build the new town's sidewalks. Making new concrete is a carbon-intensive process, so the recycling effort will spare the environment a lot of CO₂. It will take an estimated 10 to 15 years to complete the recycling job of turning the business park into a town.

As planned, the town will be fully integrated. All housing will be mixed-use, with homes ranging from an urban core of lofts above shopfronts and galleries in the downtown area (think SoHo in the '70s), to two-story townhouses with stoops on tree-shaded streets (think Brooklyn). A mix of large and small suburban houses and small duplexes with backyards featuring chicken coops and beehives ensures a steady supply of fresh eggs and honey to the stores at the town center. The town has both a highly urban core and yet within just a five-minute walk, becomes as completely rural as the surrounding farms of Sonoma County.



The job of framing the village's buildings makes use of the steel panel factory the Coddingtons recently opened on-site. This factory is of environmental interest in and of itself, powered by an acre of solar roofing. Furthermore, the prefabricated steel structures it churns out have been recycled from local SUVs; each 2,000 square foot of housing will recycle six SUVs worth of local junkyard steel. A relatively lightweight, extremely recyclable material, steel is an efficient building product.

Other sustainable aspects of the plans for Sonoma Mountain Village include green roofs, ground-source heat pumps, ultra-efficient lighting and appliances, super-insulated walls, floors and roofs, solar hot water systems and solar photovoltaic power integrated into the roof design. The building process will bring approximately 4,400 construction jobs to local workers, twice the number of Agilent jobs lost.

There are already two acres of solar panels atop the Village's new theater building, and if Kirstie Moore, the project's boundlessly optimistic Sustainability Manager, succeeds in changing the law (PUC rule 13) that currently prevents net metering, there will also be additional acres of solar atop the gigantic market hall that would power the entire community much more economically than on individual houses.

Moore told me that, "The Coddingtons learned from the first certified One Planet community, in England, where they found that once people left the town they became in effect '3 1/2 planet people' again, like everyone else in England."

Moore went on to say that self-sufficient design was a critical element in the project, "because once we leave this One Planet town, we are right back in the American economy -- and here in America we need even more planets than they do!"

The project includes a vision for a high-tech telecommute center to help reduce lengthy commutes, as well as car- and bike-sharing programs. The village will feature electric car fast-recharging centers as well as a Smart rail connection to the rest of Sonoma County and into Marin.

Tenants include Comcast and locally loved caterer [Sally Tomatoes](#). Like the extremely fast-growing [small business incubator](#) housed in the original buildings, all current tenants got a complete sustainable revamp to zero carbon.

A preference for local workers will be codified into the town's charter; restaurants, stores, offices, the theater will be required to hire local first. A certain percentage of the space within stores will be set aside for local produce and preserves, not only recycling income within the local economy, but also greatly reducing food miles traveled. A daily farmers market will be held every day in the public square at the center of town, or housed inside the giant community center on rainy days.

Town-wide composting will create new, fresh soil to nurture community gardens, small parks and even fruit trees for snacks along nature walks into the preserved habitat at the Village's outskirts. There will be habitat-protected bioswales that act as wetlands, conserving water in a four-million-gallon reservoir underground that will recycle water for irrigation purposes.

The radical concept behind Sonoma Mountain Village is that we really can develop our towns in a kind and equitable way that honors the contributions of all us, taking sustainability further than simple "green design." The project promotes an entirely new green lifestyle in a respectful way.

To realize their dream, the Coddings reached out to a panel of sustainability experts ranging from the international [Bioregional](#) One Planet team that certified Abu Dhabi's [MasDar City](#), to wetlands protection scientists and leading architects and town planners. Laura Hall of [Hall Alminana](#) was among them. Hall Alminana is one of the leading U.S. New Urbanist town planning firms, and a strong proponent of the [Smart Code](#), which turns the suburban zoning model of compartmentalized bedroom communities versus separate industrial parks on its head.

Hall is "thrilled that the green movement is moving into the human habitat and away from green gadgets only," and clearly happy that the Coddings' family vision for this project intersects so well with her own.

Hall said that she has been living in a remodeling project, herself, for 12 years, and I think she appreciates one other aspect of the gentle pace of Sonoma Mountain Village: Even its funding mechanism is self-sustaining, rather than shackled to an unstable credit market. "Some buildings can be used while the planning is going on," she explains. This will keep the project funded with rents from current tenants even as the new town acquires its permits and the recycling of effort takes shape around them.

The development model being employed by Sonoma Mountain Village is a new prototype for the U.S., and as such, will be very expensive, according to Kirstie Moore. "So much of what we are doing has never been done in this country," she says. So taking it slow -- building as income rolls in -- literally recycling rents into buildings -- is a sustainable funding mechanism.

In many ways, the Coddings' profoundly lovely vision of radical Utopian development could have an impact on future city plans in the U.S.

What a beautiful way to end the Age of Oil.