# RE People

**Who:** The Janssen family
**Where:** Basalt, Colorado
**When:** 1994 to present
**What:** Off-grid microhydro- & solar-electric systems
**Why:** Necessity & passion

The original tipi.

The Janssen family at the hydro intake in winter.

Ten years ago, Robb and Ginger wrote *Home Power* this letter:

*We live in a solar powered tipi at 9,300 feet. It is amazingly satisfying, and the system is so small. We have 44 watts of PV, an 81 amp-hour battery, and small controls. It powers lots of light, radio, CD, CB, AA battery charger for headlamps, chain saw sharpener, and charger for 9.6-volt Makita cordless tools, etc. We have lots of sun! Robert Janssen • Aspen, Colorado*

Over the years, Robb and Ginger have continued to develop their strong interest in creating a self-sufficient lifestyle. Their home and work reflect an interest in sustainability and renewable energy (RE) in its many aspects. Robb and Ginger own and operate Basalt Mountain Gardens, a chemical-free nursery and landscaping service specializing in edible, native, and drought-tolerant plants, and landscaping for energy efficiency. They love working for clients who use renewable energy.

"For us to keep clients for the long term, there has to be some sort of mutual respect—friendship. We admire and want to help clients who are trying to use less irrigation water and fewer pesticides, herbicides, and chemical fertilizers. We feel a kinship with people who are trying to grow some of their own food and trying to use less fossil fuel energy."

Robb says that they found RE out of necessity. "Ginger and I bought our tipi because it was bigger than our '76 Volkswagen Westfalia," says Robb with a smile. "We lived in the tipi, outside of town and away from the grid because we did not want to pay rent on housing or electricity. We used an old propane fridge out of an RV to keep our beer cold and food fresh. When we wanted lighting at night and music too, a friend showed us a solar energy catalog. The technology was a perfect fit for us—clean, portable power for a self-sufficient-ish lifestyle."

A single-module solar-electric system gave Robb and Ginger a taste of what renewable energy can do, and after three years of tipi living, they purchased 35 acres of steep ground in the mountains above Basalt, Colorado. It met their requirements for southern exposure and flowing water, and the property included a 1970s-vintage, 700-square-foot cabin, where Robb & Ginger's two daughters were born. The girls, now 7 and 5, "have only known RE at home."

A microhydro turbine produces most of the Janssens' household electricity, and a 240-watt PV system provides the rest. Traveling the dusty road up from the valley floor through desert scrub to their homestead leaves you wondering how there could possibly be an on-site hydro system, but as you drive into the yard, you're greeted by a large, year-round creek flowing down the hillside in what is otherwise a very arid landscape.

The Janssens' new home will incorporate passive and active solar heating.

Robb and Ginger are now hard at work building their dream home. Plans for their hybrid, earth-bermed, stick-and-timber frame structure call for passive and active solar heating, including solar thermal for water and space heating, and, of course, use of their existing solar- and hydro-electric systems.

Robb and Ginger's goal is to complete their new house and move in before their spring landscaping season starts. Their next project is to build a solar greenhouse where they can grow enough food to feed their family year-round, bringing them even closer to their dream of self-sufficiency.

—Ian Woofenden

A microhydro turbine (shown here) and solar-electric modules provide the Janssens' electricity.