

# Going “green” at the mill: Solaqua Power & Art

*Jody Rael’s brainchild merges the science of alternative and renewable energy with the arts by converting the remaining parts of the old Columbia Paper mill into a solar and hydro-powered business complex.*

By Debra Hall

“We were among the first weekenders,” Jody Rael stated of his Columbia County connection. Having maintained a home here since 1966, Jody Rael’s Chatham roots run deep.

“My mom and wife started The Grainery.” With such a profound bond to Chatham, it comes as no surprise that upon the paper mill’s closing in 1994, Jody Rael’s vision since the 1970’s of establishing a solar and hydro-power business complex would prompt him to purchase the old paper mill on Route 295 in 1996. As Rael eyed the waters of the Stony Kill upon which the old paper mill sits, he saw a way to make his vision a reality.

Moving the business his father started, Kling Magnetics, to the old paper mill was his initial step toward creating a solar and hydro-powered business complex. Currently, Kling Magnetics receives over 30% of its energy through the solar panels recently installed, and all of its hot water from a solar water heater. The building that houses Kling will soon be heated with a waste vegetable oil boiler and outfitted with a soy-based foam insulation as Rael moves toward “greening” the entire mill complex.

## Solaqua Power & Art

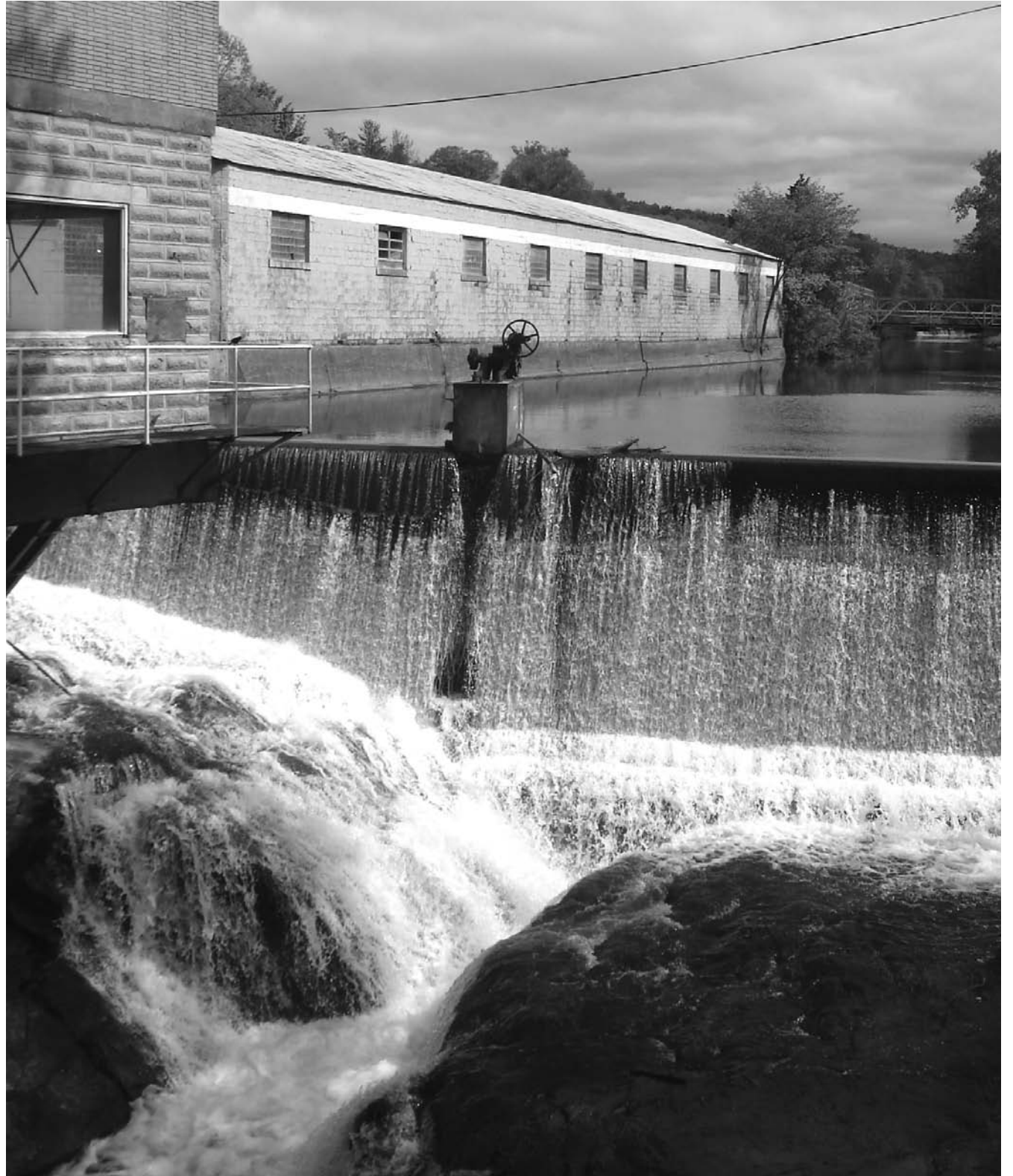
As a separate entity from Kling Magnetics, Solaqua Power & Art is Rael’s brainchild that merges the science of alternative and renewable energy with the arts. Upon completion, Solaqua will be the realization of converting the remaining parts of the mill into the solar and hydro-powered business complex Rael envisioned.

In the process of determining what to install into the vast space available at the old mill, Rael learned about Artspace, the nation’s largest not-for-profit real estate developer for the arts based in Minneapolis. Artspace develops self-sustaining, livable work space for artists using investors and tax-credits. Artspace only accepts three projects a year. As most Chathamites know, the Solaqua project received overwhelming community support at several town meetings. As a result, Artspace agreed to accept Solaqua as one of its projects.

Once Artspace accepts a project, the applicant, in this case Solaqua, must come up with the seed money to begin the process. Once the seed money is raised, Artspace comes in with its investors and tax-credits, to grow the investment and oversee the development as project manager. In the case of Artspace’s Buffalo project, they were able to turn the initial \$1 million applicant investment into \$20 million.

## Master plan being developed

Solaqua is also in the process of developing its master plan through its recently named Executive Director, Cherie Miller Schwartz. To that end, the Troy Architectural Project has just completed its initial condition survey on the property and is now entering a detailed-use examination of the 100,000 square feet of contiguous space available at the old mill. Students and faculty from Rensselaer Polytechnic Institute’s School of Architecture established the Troy Architectural Project (TAP) in 1969 as a nonprofit corporation to provide professional assistance to disadvantaged citizens and others in need of affordable architectural services. Rael estimates that the



master plan will be finalized by September 2007.

The initial phase of Solaqua Power & Art will include the construction of a regional foods-centered restaurant and beginning foundries, to be located in the rehabilitated south end of the mill where the paint ball operation was formerly located. The foundries Solaqua plans to install are a cleansmithing® foundry (blacksmithing with clean energy), a glass blowing studio, a ceramics studio, and a studio to manufacture glass tile using recycled glass, all of which will be powered with renewable energy. The restaurant and artist foundries will be leased spaces to independent contractors.

Additional phases of the project will include the development of retail space, artists’ studios, an eco-village living complex, and gallery space.

To promote awareness of solar power and the Solaqua project, Rael is the proud owner of a GEM (Global Electric Motorcar) car made by Daimler-Chrysler, outfitted with a state-of-the-art solar powered PA system available for use at events.

Solaqua Power & Art is wasting no time on the power-end of its goals. Currently in development is a project engineered by former Bard College intern and new Director of Research at Solaqua Power & Art, Jonathan Sarno, in which reclaimed vegetable oil has been collected since August of 2006 to heat the building and be utilized as fuel for a 60 kw diesel generator. The Hudson Valley Agri-Business Development Corporation is also examining this project to determine the feasibility of manufacturing biodiesel fuel versus distribution of biodiesel fuel. What the future holds is uncertain, according to Rael, but “ideally, we could possibly see a biodiesel filling station as part of the Solaqua complex.”

The creation of “green collar” jobs at Solaqua is yet another piece of the puzzle. Solaqua opened its initial incubator business, Sun Dog Solar, which designs and installs photovoltaic (PV) solar electric systems for residential and commercial applications.

Although there are a variety of concepts Rael has in development; suffice it to say his vision is clear, purposeful, and moving toward realization at a steady-rate. ☺