



# Solar Washington Newsletter

SUMMER SOLSTICE 2005

[WWW.SOLARWASHINGTON.ORG](http://WWW.SOLARWASHINGTON.ORG)

What's in this issue:

- ☀ [Homebrew hydro](#)
- ☀ [Solar with neighbors](#)
- ☀ [Green Tag solar](#)
- ☀ [President's column](#)
- ☀ [Energy tips on website](#)
- ☀ [Webmaster speaks](#)
- ☀ [Mayor's green pledge](#)

## RE means more jobs

Boosting the nation's use of renewable energy from 2.5 percent today to 20 percent by 2020 would create 355,000 jobs. Using fossil fuels instead of RE would result in 157,480 fewer jobs. (Union of Concerned Scientists)

## Coal is not so smart

Each year, between 316,000 and 600,000 American children suffer a loss of intelligence due to mercury pollution (Mount Sinai Center for Children's Health and Environment). Coal-burning plants belch out 40 percent of the nation's mercury emissions.

## '55 solar cell still ticking

One of the original solar cells invented at Bell Labs in the mid-1950s is still pumping out electrons. Its original 6-percent efficiency is now 5.1 percent.

*(National Renewable Energy Laboratory)*

## Millwright likes his hydro power homemade

Some 20 years ago, Terry Weller, a local millwright, found 35 acres of heaven in a remote rural property with a little bitty stream babbling about something 100 feet down in a canyon.

Turns out, that stream was talking about power – lots and lots of power. Because pipes and such are no stranger to this clever mechanic, it didn't take Terry long to figure out how to get all of that power up out of the canyon and into his house. The mystery is how he did it so cheaply. (Hint: He's really, really clever.)

Terry's small hydro turbine spins out 120 watts of electricity 24/7 and runs it up the bluff through 00 gauge cable. A homemade ram pump sends a ton of water up the same bluff. And, oh yeah, there's solar power on his roof, too. See

<http://www.solarwashington.org/newsletters/0506/TerrysHydro1.pdf>



## Beautiful solar home riles testy neighbors

Stuart and Pat MacRobbie had their new home professionally engineered and professionally outfitted with solar photovoltaic panels, a solar hot-

water heater and the latest in a whiz-bang dual-axis motorized tracker. It's a beautiful home and a beautiful RE system that makes the world a better place.



And the MacRobbies are about as nice a couple as you'll find. So what's with all the controversy? (Don't

worry. Stuart loves it.)

See <http://www.solarwashington.org/newsletters/0506/MacRobbie2.pdf>

## Green Tags make it easy to be green

Cascade Solar and Bonneville Environmental Foundation have made it easy to be green. For you grid-tied solar types, that means being paid an extra 10 cents per kilowatt-hour for all of that clean energy you produce. Hey, this makes sense. See

<http://www.solarwashington.org/newsletters/0506/GreenTag3.pdf>

## Wave energy gets boost

AquaEnergy Group Ltd. Of Mercer Island has received a \$1 million investment to build a test buoy off the coast of Neah Bay. The buoy uses the up-and-down motion of waves to spin a turbine and create electricity. The investment comes from Finavera Ltd., a European renewable-energy investment firm that will take a stake in AquaEnergy. AquaEnergy plans to build a field of ocean buoys off Neah Bay and market the electricity at 4 cents per kilowatt-hour.

## Wind power underused

Washington has the wind-power potential to produce 3,740 megawatts of electricity. To date, the state has just 240 megawatts of wind power installed. In the West, Montana has the greatest potential – 116,000 megawatts, with just 2 megawatts installed.  
(American Wind Energy Association)

### We're Solar Washington

Solar Washington is a chapter of the American Solar Energy Society. We're a private, not-for-profit association for people and organizations interested in solar power, energy efficiency and renewable energy.

#### Website and email:

[www.solarwashington.org](http://www.solarwashington.org)

[info@solarwashington.org](mailto:info@solarwashington.org)

Phone: (206) 222-7113

**Next meeting:** Please watch our website for the [next meeting](#). We hope to see you then.

## Our president's column

### Solar legislation passes, tour planned

The governor signed two solar bills into law that are going to make solar power a lot more cost effective in Washington. Full details won't be known until July, but things are really looking up.

The 2005 Solar Home Tour is looking better than ever. Give us a call if you want to be part of the action.

For details, see Pam's column at

<http://www.solarwashington.org/newsletters/0506/PrezCol.pdf>

### Mayors take stand against global warming

Our own Seattle Mayor Greg Nickels won the unanimous support of U.S. mayors meeting in Chicago to lead the fight against global warming and climate-scale pollution. Now, if we can just get that guy in the White House to own up.

See Val's story for full details at

<http://www.solarwashington.org/newsletters/0506/MayorsTakeAction.pdf>

### Our webmaster captures historic signing

SW Webmaster George Meyer captured the historic signing of two solar bills by Gov. Gregoire and has posted a video of her talking about them on our website. He also has posted the skinny on a solar-powered drag race (we're talking world records, here) and a photo gallery of incredible solar homes.

See <http://www.solarwashington.org/newsletters/0506/GeorgeColumn.pdf>

### The last word

Doesn't it seem, at times, like those of us who care about the earth are pushing a really, really big boulder up the hill? The "Healthy Forests Act" actually denudes forests. Our air is muddied by a "Clear Skies Act." The Clean Water Act is being gutted. And, the latest, the White House has a longtime oil-industry lobbyist rewrite a scientific report on global warming to tell us that everything is just fine.

OK, but we're winning some, too.

In this issue you can read about a Green Tag program that offers incredible support for small residential solar systems. New SW writer Val Streeter stayed up late to bring us breaking news about Seattle Mayor Greg Nickels lining up cities nationwide to fight global warming. And Pam and George give us some inside poop on two new solar bills that are going to put Washington on the solar map.

And in this issue, we start a new conservation feature on our website. We offer some great ways to use energy more wisely and save a ton of money doing so. See <http://www.solarwashington.org/EnergyTips.htm>. We'll keep it updated and add new tips from time to time. Please help us out with your own ideas. In this country, leadership is going to have to come from the grassroots.

As always, if you want to make your voice heard in this newsletter, contact us at [newsletter@solarwashington.org](mailto:newsletter@solarwashington.org).

– Josey Paul, editor