



Photo: South Coast Solar

Solar rebuilding in New Orleans: One wing of the Warren Easton Senior High School was equipped with a 30-kilowatt Uni-Solar roll out array, which was glued onto the roof in only one day.

## New Orleans goes solar

**Solar Louisiana:** Which state in the U.S. has the best solar policy? If Louisiana is not the first state that comes to your mind, you are probably not alone – but not necessarily right either. **pV magazine** visited the state in November to see what the future of solar might look like there.

Four years ago, anyone driving into New Orleans' Ninth Ward had to brace themselves emotionally. Here, the levee breach after Katrina was the worst. In other parts of the city, flooded homes stood in water for weeks. In the Lower Ninth Ward, the force of a 15-foot wall of water literally scraped away entire blocks of this densely populated community.

Drive into that community today, and you will see the first solar homes going up. Actor Brad Pitt is helping to finance the construction of 150-200 solar homes in his Make It Right project. Pitt got his feet wet in solar working with Global Green, an international sustainability NGO that set up shop in New Orleans after Katrina.

Troy Von Otnott is cofounder of South Coast Solar, the solar firm that has probably benefited most from recent events. The reasoning for his support for solar is revealing: "My sister did not evacuate New Orleans when Katrina hit, and we did not hear from her for two weeks. Everyone feared the worst. You can imagine how I felt when I finally got a call from the Red Cross saying she and her kids were at a shelter in Baton Rouge and were fine." For Von Otnott, a real estate developer, the phone call was a life-changing event. He resolved to stop "wasting my time developing entertainment projects" and spend all of his time on sustainability projects.

Environmentalism and religion seem kindred spirits in Louisiana. "I almost

became a priest," explains Jesse George, legal expert at the Alliance for Affordable Energy, a local energy non-profit based in New Orleans. Instead, he chose a career in protecting God's creation. The Holy Cross neighborhood in New Orleans also "saw the light" after Katrina and "resolved to build back carbon-neutral," according to Forest Bradley-Wright, an outreach officer at the Alliance who attended weekly community rebuilding at meetings for a few years. Holy Cross is now the site of Global Green's first solar homes, and a new community center will also have a solar roof.

This change of heart is not limited to New Orleans. At a recent meeting of the Louisiana Public Services Commission,

one of the five commissioners had an expert hold a presentation on how climate change wasn't happening. The other four commissioners rebelled. "And the funny thing is, even that one climate-skeptic commissioner is on our side when it comes to Louisiana getting a Renewable Portfolio Standard," explains George. The doors therefore seem wide open for solar in Louisiana.

### Donations get things going

Solar is thus currently being developed in Louisiana based on two pillars: donations to high-visibility projects in the rebuild after Katrina; and a new state policy that everyone is eligible for throughout the state.

"We put up the 30 kilowatt array on Warren Easton High in only one day," explains Von Otnott. The thin film panels installed on the school were a donation from Entergy and Nike and were glued directly onto the roof, which was made "solar-ready." Linda Stone of Global Green explains what "solar-ready" means: "The roof has to be strong enough to support solar panels, there has to be sufficient space on roof for the panels, and room has to be left in the walls to run the necessary conduit for the panels."

She says Global Green does not actually do the photovoltaic parts of the school projects itself but is providing funding to the Recovery School District, so they can utilize third parties like South Coast Solar. "In four schools, we invested 75,000 U.S. dollars in energy audits and retrofits such as efficient lighting, solar shades, occupancy sensors, and thermostat adjustments for occupancy load and seasons. The estimated payback averages around 23,000 dollars a year, so we are quite pleased." The renovation money comes from the Bush-Clinton Katrina Fund, and two other schools ("Green Model Schools") are receiving far larger sums to ensure that they attain LEED Silver certification (the "Leadership in Energy and Environmental Design" certification that was developed by the U.S. Green Building Council).

In Holy Cross, "Sharp donated the panels, the inverters, and installation," explains Karen Wimpelberg, cofounder of the Alliance. Brad Pitt shoulders much of the funding for homes in the

Photo: Craig Morris



This house, part of Brad Pitt's Make It Right project, would float if flooded, though it is currently the only one in New Orleans that would do so.

Advertisement



## TRUST® Insurance Brokers

Are you looking for a global partner that understands your technical needs? Since 1999 we

### TRUST in Solar

We offer insurance solutions for your design, building or operation phase and provide specialised products such as

**Performance Guarantees**  
**Recycling Guarantees**  
**Dismantling Guarantees**

Let's team up and tackle your challenges together. See you at the **PV Power Plants 2010 – EU** in Prague

TRUST  
Solar Valley GmbH  
Thalheim

TRUST  
Versicherungsmakler AG  
Berlin | Cologne | Mannheim | Potsdam

TRUST  
Insurance Brokers AG  
Zurich

TRUST Re  
Asia Pacific Ltd.  
Kuala Lumpur

TIB  
Professional Risks (UK) Ltd.  
London

**Contact Information:**  
Phone: +49 (0)30 832 110 600  
E-Mail: [trustinsolar@trust-ag.com](mailto:trustinsolar@trust-ag.com)  
Christian Leers, client director renewables

[www.trust-in-solar.com](http://www.trust-in-solar.com)



Photo: Craig Morris



Three new solar homes in the Holy Cross neighborhood. Unlike many European solar homes, the ones in New Orleans are not completely covered by solar panels.

Ninth Ward, where the old property owners have the right of first refusal. Make It Right tries to make a generous offer to people who chose not to come back.

But donations are no way to keep solar going in the long run. Fortunately, Louisiana is throwing a lot more support behind solar, regardless of whether you are a Katrina victim or not. The state policy is more interesting than the donations because everyone can be involved – everyone, that is, except businesses. The state policy does not yet apply to commercial buildings, though that option could soon be added.

### 30 + 50 = 70?

The U.S. already offered a 30 percent tax rebate for solar roof arrays, but at the beginning of 2008 Louisiana added on an additional 50 percent tax rebate. Theoretically, you can now write off 80 percent of investments in solar up to a maximum of 25,000 U.S. dollars per system. “But we have found that 30 + 50 generally equals around 70,” explains Christian Roselund, communications director at the Alliance for Affordable Energy. The reason is that the 30 percent federal tax rebate is not paid in cash if you cannot write off the full amount – but the state rebate is. So while you always get all of the 50 percent state

rebate, most people will not get the full 30 percent federal rebate.

25,000 dollars is roughly enough for a three to four-kilowatt roof array, and if you get the full 80 percent back, the system will only cost you 5,000 dollars. If you get 70 percent back, you still only have to pay 7,500 dollars. Factor in the average power bill of 110 dollars a month in Louisiana, and solar clearly pays for itself in only around four to six years under the current policy. Nonetheless, obstacles remained.

For instance, the full amount has to be paid in advance, and you get the tax rebate paid out the following year. “25,000 dollars is a lot of money for most of my constituents,” explains Louisiana public service Commissioner Foster Campbell, who mainly represents northern Louisiana. Obviously, bridge financing is needed, so Louisiana recently provided for it. Based on the bond model adopted in Berkeley, California, homeowners can now receive the upfront funding they require from the state and pay off the loan as part of property taxes over 20 years. This option also allows the cost of the PV array to be passed on as property taxes when the house is sold.

Between generous donations and creative public policy, a true solar mar-

ket has come into being in Louisiana. “I estimate that there are probably some 65 solar contractors in Louisiana,” explains South Coast Solar’s Von Otnott, “but most of them are two guys and a truck.” When asked about a rumor that he himself started off only two years ago with a credit limit of 25,000 dollars on two credit cards, he smiles: “I’m afraid you’re right. We started out as three guys and a truck, but we are up to 32 guys and gals and five trucks now.”

One of the reasons for his company’s success is its collaboration with IBOG (One Block off the Grid), a sort of door-to-door solar peddler based in San Francisco, but with a number of regional offices. One of the founders, Dave Llorens, hails from Shreveport, Louisiana, so Louisiana immediately registered on IBOG’s radar in California when the new solar policies were implemented at the beginning of 2008.

“A lot of our customers do not know the difference between a kilowatt and a kilowatt-hour,” explains Llorens, “so we save the solar contractors the effort of doing all this explaining.” But customers also benefit, as Llorens points out. “First, we offer lower prices by getting around 100 homeowners to sign on, and then we buy bulk. Second, we ensure quality by select-

ing only the best local contractor” – in the case of New Orleans, South Coast Solar.

“We are very happy working with IBOG,” says Von Otnott. “We usually have a closing ratio of around ten percent, but with them it is closer to 20 percent, so they really earn their commission of 25 cents per watt.”

### Policy backlash?

Nonetheless, the Louisiana solar community is concerned that the current policy might place quite a great burden on tax revenue, and legislators could respond by slashing the program drastically. For Von Otnott, the best option is obvious: “Nothing works as well as feed-in tariffs.” He and the Alliance were instrumental in getting Louisiana Senator Nick Gautreaux to implement the state’s current policies. Von Otnott says he is increasingly talking about feed-in tariffs (FITs), though he is not optimistic yet. “I have attempted to explain FITs on several occasions, and all I get is blank stares.” He feels that the concept is still too foreign to American thinking.

Fortunately, he is not alone in trying to spread the word about FITs. For instance, the Sierra Club – the largest environmental organization in Louisiana – is also actively trying to explain the concept to legislators. “This is fantastic,” says Karen Wimpelberg, the cofounder of the Alliance, which is also raising awareness about FITs. “After two decades of the Alliance being the only NGO to weigh in on energy legislation in the state, Sierra representatives are now coming to commission meetings.”

So how likely is it that Louisiana will get FITs? “First, it would be good to have an RPS,” says George. He has certainly done a lot to get that achieved. In 2008, Lambert Boissiere III was appointed to be Public Services Commission Chairman in 2009. He responded to the Alliance’s repeated calls for a Renewable Portfolio Standard (RPS) by asking if they could come up with a bare-bones draft of one. Boissiere got George’s draft RPS in early December, and his first act as chairman in 2009 was to propose it to the committee.

Then came the delays. An energy consulting firm was called in to produce a study on the potential of renewables in Louisiana. The study was presented to the commission on November 13, 2009 – near the end of Boissiere’s term as chairman. “But the really frustrating thing is that this exact study was already conducted in 2005, so all they really had to do is update the figures,” George expresses his disbelief at the ten months the study took.

The 2005 study found that Louisiana could have 22 percent renewable energy by 2020 for an additional three dollars a month on the average power bill of 110 dollars – an unsurprising finding if we consider that Germany has managed to become the world leader in solar and wind for a mere three percent surcharge added to the retail rate. But Louisiana is not Germany, and legislators found that three dollar increase to be too much, so the RPS was not adopted.

The Alliance believes that Louisiana may now very well be trying to preempt a national RPS. It is generally believed that, whatever national RPS may come

Advertisement

**power-one**  
Changing the Shape of Power

**AURORA PVI-CENTRAL**

**SCALABLE POWER**

Modular configuration on 55 KW  
independent conversion devices.



Power-One Italy S.p.a

Via S. Giorgio, 642 - 52028 Terranuova Bracciolini, Arezzo, Italy Phone: (+39) 055 9195 1 - Fax: (+39) 055 9198 185 - aesaes-eu@power-one.com - www.power-one.com

Photo: Craig Morris



In New Orleans' Ninth Ward, some homes floated away like boats during Katrina. Now, some of the new solar homes being built here are designed to float properly without structural damage.

out of the current proposals for a climate bill, the national legislation would somehow “prefer” anything that individual states already had. The idea is, no doubt, to reward states that went ahead and took the initiative, but in the case of Louisiana interest in a state RPS has specific reasons. “While most RPSs have really ramped up wind elsewhere, Louisiana does not have that much wind and is therefore concerned about Washington forcing it to set up turbines,” says the Alliance’s Christian Roselund, adding that the focus in Louisiana is clearly on solar and biomass.

### The real opponent

With all of this latent support for renewables, and potentially for FITs, the question is whether there will be any opposition at all – and the answer is yes. At present, Entergy New Orleans has a monopoly on power production in the area it serves, but that situation is similar elsewhere in the state and, indeed, everywhere in the U.S. Essentially, solar is tolerated in many areas in net-metering schemes because the effect is the same as conservation (power consumption simply seems to be reduced when the meter runs backwards), but investor-owned utilities (IOUs) may actually refuse to enter into any Power Purchase Agreements (PPAs). Yet, PPAs are needed if we want to decou-

ple power generation from power consumption.

For instance, as Louisiana agricultural commissioner Mike Strain points out, “we have a number of biogas facilities in Louisiana, but we also have instances where we could be selling electricity to the grid very cheaply if we could get a PPA.” Von Otnott says that a new policy called “solar leasing” gets around the utility’s opposition to solar PPAs. “Essentially, you simply lease the equipment from the installer, who pays upfront. You then pay a monthly bill to the installer, and at the end of the lease you get the system for a dollar.”

So what does the future hold for solar in Louisiana? The state may very well implement an RPS, if only to prevent having one dictated to it by Washington. And Louisiana is proving resourceful in getting around

the reluctance of IOUs to embrace PPAs for renewables, though more work needs to be done to cover biomass and commercial solar arrays. In all likelihood, the high-visibility projects based on donated panels in New Orleans will not produce a long-term market unless the state comes up with sustainable incentives. The current tax rebate has no volume ceiling and therefore nothing to prevent the market from overheating, a situation that is not sustainable. FITs that drop over time could help.

However, there is little risk of a market bubble at the moment. Many people in New Orleans seem to have no idea of Louisiana’s current exemplary solar policy. Basically, if you can afford to pay your power bill in Louisiana, you can afford to go solar. Now, local solar firms and activists have to get the word out. ♦ Craig Morris



### NEW ORLEANS – A UNIQUE(LY BITTER) SITUATION

The Crescent City is unique in many ways, but one of them is little known: the town is the only U.S. city whose city council regulates a wholly private utility, not a municipal one. The Alliance for Affordable Energy, a local NGO that has been weighing in on energy regulations for the past 24 years, was founded back when the fatal decision was made. “The city wanted to have more control of its power consumption,” explains Alliance cofounder Karen Wimpelberg, “but also wanted

the expertise of a private utility, which city officials didn’t have.” This compromise was therefore reached. After Katrina, the drawbacks became painfully clear. Entergy New Orleans declared bankruptcy – some 80 percent of its assets had been damaged in the storm – and said the city would have to bail it out if it wanted power back. New Orleans felt betrayed, but Entergy pointed out that it was prevented by law from having its parent company bail out the local subsidiary.