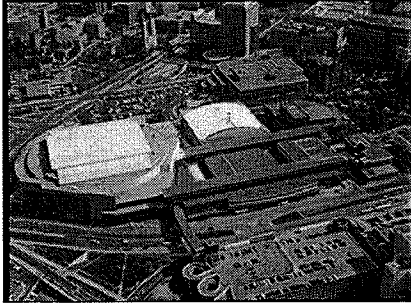


St. Paul's River Centre to Install a 1-MW Solar System, Largest in MN



The River Centre (directly across from the parking garage) has ample roofspace. And the Excel Energy Center (white and circular) next to it? Even more. [RiverCentre](#)

St. Paul, Minnesota. Yep, that cold, frosty city way up north is about to get solar power for the River Centre, a large convention center for the city. The 1-megawatt system will be funded by \$1 million from the American Recovery and Reinvestment Act (ARRA), which is commonly known as federal stimulus money. The money will be administered by the US Department of Energy with a matching amount from St. Paul's District

Energy Utility, a nonprofit energy company that owns the largest biomass-fueled hot water heating system in North America. The River Centre system will be the largest in Minnesota upon its completion around December of 2010.

Sunlight will not be an issue, according to Charlie Hemmeline, director of Market Transformation for the Energy Department's solar program. Hemmeline explained that **St. Paul gets as much or more sun than Germany, the world's leading producer of solar technology.** That's not to say that Germany gets the best sun for harvesting with a PV system, but it's also true that PV systems love sun and hate the heat. Heat on a PV system actually reduces its efficiency because the diodes and other small connectors get too hot.

St. Paul hopes to spur solar energy development in **Minnesota, a state that is slightly lagging** due to high material costs and lack of exposure to the technology. That's another goal of the River Centre project, to help understand cold climate applications as well as use the technology to bring prices down. Good thinking - it's not getting any cheaper just sitting on a shelf. Think of the slow start and then boom of computers for a related example. Another aim of this project is to create highly skilled renewable energy professionals and jobs for them to do, both as an economic recovery plan and environmentally responsible initiative.

The system will help District Energy Utility's goal to become more renewable. The company sees it as an investment without a time line for breaking even - probably wise. District Energy also burns natural gas and coal to generate power. The panels will offset some of the company's electricity needs, but the ultimate goal is to see how well biofuels and solar harvesting can be mixed to create a stronger end result.

Not to be outdone, Minneapolis has already begun issuing a request for proposals (effective today, Nov. 2) to build a 600-kw system on the Minneapolis Convention Center. So, St. Paul, your work in expanding the solar to the north country has already begun. There's another sizable installation in the works at St. John's Abbey in St. Cloud, Minnesota that weighs in at 575 kilowatts. Not bad for all those domes and spires the abbey has.

Counting myself among those who hail from Minnesota, I'm very, very glad that this technology is gaining a foothold there. I'm especially interested in how the solar hot water heaters will work after a night of 10 to 20 degrees below zero. We'll see, I'm sure they've got that drawn into the plans - it's not something most residents forget. The best part? If this actually works and works exceptionally well, there are a lot of uses for solar in Minnesota, like ice hockey rinks that usually have massive amounts of square footage roofs, **the Mall of America, for which any greening is a good greening** and rural applications, like in Ely (more or less in Canada for those not familiar), for the times when power goes out along the remote stretches of lines from the population hub. It could really make life nicer for those that enjoy it way out there, even when they're snowed in.

RiverCentre, a state-of-the-art convention center, contains 15 meeting rooms, a Star Tribune ballroom named after Minneapolis's leading daily newspaper, and 100,000 square feet of exhibition space. It was built in 1979 and fully renovated in 2001. The panels are to be placed on the roof of the centre.