

Prairie group to release publication on building a solar city

A group from the Canadian prairies is days away from releasing a publication on designing cities to run on solar energy. The publication, *Building a Solar City*, offers instruction on making use of solar energy — affordably.

“The publication offers a lot of guidelines for doing solar design, particularly in the prairies, but a lot of it is applicable elsewhere,” says Robert Bjerke, housing coordinator for the City of Regina.

Robert has an extensive interest in solar energy and is a former member of the Solar Energy Society of Canada. He has been instrumental in initiating an affordable housing/solar energy pilot project in Regina. For that project world-renowned architect Avi Friedman and a group of his students from McGill University provided solar-friendly designs for seven sites in the city.

The city is moving forward with potentially incorporating these designs into one of the sites.

Robert notes that the designs are particularly interesting because they largely focus on laying out the buildings in such a way as to maximize solar energy through windows. It’s called passive solar energy (sunlight through a window).

“One of the arguments for passive solar energy is that the costs are not much different for construction,” says Robert. “It’s just the way you use the building materials that makes the difference.”

Some of the design features that help maximize passive solar energy include: orientating the building south to take in the most sunlight during the day, using large windows, and including trees near the buildings to act as natural shading

devices that save on cooling costs in the summer then lose their leaves to let sunlight through in the winter.

Studies project an energy cost savings of 75 per cent because of these as well as other design features developed by the McGill group.

The soon-to-be released publication includes these as well as much more extensive guidelines and designs for making use of solar energy.

The Saskatchewan Research Council is heading up this project.