



2009 WISCONSIN

Renewable Energy Summit

Renewables, Sustainability, Energy Efficiency,
Social Responsibility, and Green Energy Practices

Solar Thermal & Geothermal

Session 15-6

DATE:

FRIDAY, MARCH 27, 2009

Breakout Session 15-6:

Time:

1:30pm - 3:45pm

Presenters:

Commercial and Institutional Solar Water Heating Systems

Craig Tarr, Energy Concepts

This presentation will inspire commercial building owners and or facilities managers to consider solar thermal for their facilities with water or pool heating needs. Mr. Tarr brings the discussion and implementation of renewable energy to a new realm of professionalism. He will demonstrate how well engineered systems installed by licensed plumbing and heating contractors should be an essential mechanical/plumbing system for any building with a water heating requirement.

The presentation will provide a basic understanding of solar thermal system operation, design considerations, building interface and economics. Real world examples from WI will be discussed from project inception to close-out. Participants will leave with an ability to evaluate if a solar thermal system should be considered for their facility.

**Commercial Geothermal Heat Pump Systems
and the Path to Net Zero Energy**

Manus McDevitt, Sustainable Engineering Group

An overview of geothermal heat pump systems for commercial buildings and how this technology can help guide us on the path to net-zero energy buildings.



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Presenter Biographies:

Craig Tarr

Craig Tarr, the principal and founder of Energy Concepts is a Licensed Professional Engineer (PE) in 10 states and is a LEED™ accredited professional. He holds a BSME degree from Colorado State University with an emphasis in solar and wind engineering. Mr. Tarr is nationally recognized for his expertise in the field of mechanical engineering as applied to the built environment. Mr. Tarr brings 20+ years of commercial building engineering expertise to the renewable energy sector. He offers the unique ability to integrate renewable energy system designs into more traditional mechanical/electrical building systems.

Manus McDevitt

Manus McDevitt, has been extensively involved in the sustainable design industry from early in his career. His experience includes the design of geothermal heating and cooling systems, displacement ventilation systems (including raised floors), air-to-air energy recovery systems, natural ventilation and chilled beam systems. Project experience includes hospitals, research laboratories, corporate campuses, schools, government buildings, and art and entertainment complexes. He has been involved extensively in obtaining LEED certification for several buildings and is currently a LEED accredited professional. Manus holds a certified Geothermal designer license and serves as a board member for the Wisconsin Geothermal Association.