

Como Lakeside EV Charging Station





- 2 kilowatt (kW) photovoltaic installation with 8 Solar World 250 watt modules completed April 2012.
- Estimated 2,447 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Innovative Power Systems
- Installed cost: \$38,255 minus \$4,275 for Xcel Energy's Solar*Rewards rebate
- Funded by: Grant from the US Department of Energy through the American Reinvestment and Recovery Act (ARRA) of 2009.

Photo Credit: Anne Hunt



Como Park Pool





Photo Credit: Bryan Murphy

- Solar hot water heating system consists of 12 panels (30 tubes per panel) evacuated solar tubes by Kingspan Product Thermomax HP200 and completed in May 2012.
- Designed by: Nelson Rudie Associates
- Installed by: Modern Piping
- Installed cost: \$150,000 grant of the \$200,000 total installed cost.
- Funded by: Solar Energy Legacy Grant through the Minnesota Department of Natural



Great Rive Passage Solar Kiosks





Photo Credit: Don Varney

- Four solar kiosks and interpretative signage located at the Ford Dam overlook on Mississippi River Boulevard: Crosby Farm East entrance parking lot located at Shepard Road and Elway; Shepard Road and Randolph; and Burns Avenue and Johnson Parkway were installed June 2012.
- 2 68 watt Uni-Solar photovoltaic modules completed August 2012.
- Designed by: Thorbeck Architects Inc. in collaboration with Hunt Electric.
- System Installer: Global Specialty Contractors Inc.
- Installed cost for solar portion: \$21,000
- Funded by: Solar Energy Legacy Grant through the MN Department of Natural Resources.



McMurray Field EV Charging Station





Photo Credit: Cy Kosel

- 2 kilowatt (kW) photovoltaic installation with 8 Solar World 250 watt modules completed in April 2012.
- Estimated 2,447 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Premier Electric
- Installed cost: \$31,635 minus \$4,500 for Xcel Energy's Solar*Rewards rebate
- Funded by: Grant from the US Department of Energy through the American Reinvestment and Recovery Act (ARRA) of 2009.



Public Works Garage





Photo Credit: Kurt Schultz

- 39.7 kilowatt (kW) photovoltaic installation with 169 of Schott Poly 235 modules completed August 2011.
- Estimated 50,630 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Zenergy
- Installed cost: \$177,145 minus \$89,640 for Xcel Energy's Solar*Rewards rebate
- Funded by: Grant from the US Department of Energy and MN Department of Commerce through the American Reinvestment and Recovery Act (ARRA) of 2009.



Ramsey County Law Enforcement Center





Photo Credit: Cari Williamette

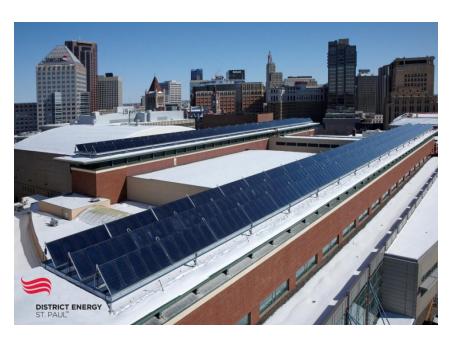
- Solar thermal installation with 35 Minnesota made Solar Skies North Star Series modules completed September 2012
- Designed by: Westwood Professional Services in cooperation with District Energy St. Paul
- Installed by: NAC and Bald Eagle Erectors (steel)
- Installed cost: \$257,900
- Funded by: Grant from the US Department of Energy and the MN Department of Commerce through the American Reinvestment and Recovery Act (ARRA) of 2009.



RiverCentre Solar Thermal



DISTRICT ENERGY ST. PAUL™



- 1.1 Mega Watt thermal equivalent with 144 Arcon industrial grade solar thermal panels completed in January 2011.
- Designed by: District Energy St. Paul & TKDA
- Installed by: Sheey Construction, Pioneer Power and Amerect Inc.
- Installed cost: \$2.1 Million
- Funded by: \$1 million Market
 Transformation Grant from the US
 Department of Energy through the
 American Reinvestment and
 Recovery Act (ARRA) of 2009 and
 \$1.1 million match by District
 Energy St. Paul



Parking Ramp

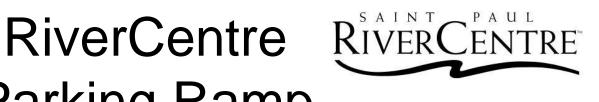




Photo Credit: Bruce Schnack

- 82 kilowatt (kW) photovoltaic installation with 348 Global Watt modules completed March 2012.
- Estimated 100,000 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Hunt Electric and Bald Eagle Erectors (steel)
- Installed cost: \$629,732
- Funded by: Grant from the US Department of Energy and MN Department of Commerce through the American Reinvestment and Recovery Act (ARRA) of 2009.



Rondo Library





Photo Credit: Kurt Schultz

- 39.7 kilowatt (kW) photovoltaic installation with 169 240 watt Sharp modules completed September 2011.
- Estimated 50,630 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Zenergy
- Installed cost: \$184,865 minus \$89,358.75 for Xcel Energy's Solar*Rewards rebate
- Funded by: Grant from the US Department of Energy and MN Department of Commerce through the American Reinvestment and Recovery Act (ARRA) of 2009.



Science Museum of MN





Photo Credit: Bruce Schnack

- 10.4 kilowatt (kW) photovoltaic installation with Minnesota Made 42 RAIS C tenKsolar modules completed in June 2012.
- Estimated 12,770 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Enhanced Home Systems
- Installed cost: \$76,880 minus \$23,467 for Xcel Energy Solar*Rewards rebate and \$28,682 Minnesota Bonus
- Funded by: Grant from the US Department of Energy and MN Department of Commerce through the American Reinvestment and Recovery Act (ARRA) of 2009.



St. Anthony Park Recreation Center





Photo Credit: Kurt Schultz

- 7.75 kilowatt (kW) photovoltaic installation with 33 Grape Solar modules completed September 2011.
- Estimated 9,825 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Innovative Power Systems
- Installed cost: \$34,355 minus \$17,820 for Xcel Energy's Solar*Rewards rebate
- Funded by: Grant from the US Department of Energy and MN Department of Commerce through the American Reinvestment and Recovery Act (ARRA) of 2009.



Sun Ray Library EV Charging Stations





- 2 kilowatt (kW) photovoltaic installation with 8 Solar World 250 watt modules completed April 2012.
- Estimated 2,447 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Zenergy
- Installed cost: \$40,236
- Funded by: Grant from the MN Department of Commerce



Western District Police Station





Photo Credit: Bruce Schnack

- 39.7 kilowatt (kW) photovoltaic installation with 169 Schott Poly 235 modules completed June 2011.
- Estimated 50,630 kWh annual production
- Designed by: Westwood Professional Services
- Installed by: Zenergy
- Installed cost: \$177,850 minus \$89,358.75 for Xcel Energy's Solar*Rewards rebate
- Funded by: Grant from the US Department of Energy and MN Department of Commerce through the American Reinvestment and Recovery Act (ARRA) of 2009.



Solar Saint Paul





Multiple Energy Innovation Corridor Installations
Photo Credit: Bruce Schnack