

Eco-Solar Home Tour 2011 Site Summary

Site #1 – Mills Geothermal Upgrade. 10821 - 79 Avenue, Edmonton

This is a 1949 house that was upgraded from a drafty Energuide of 39 to a near new rating of 79. This house features geothermal heating, extensive energy efficiency upgrades, a xeriscaped front yard, a number of LED lighting ideas, and a new grid-tied solar electric system. This house features extensive explanations on posters all around the site.

Site #2 – Pearson Maraj Cogeneration House. 7615 - 111 Street, Edmonton

This duplex is the first residential installation in North America of an electric/heat cogeneration unit. This new house features a passive solar design with R-50 walls and an R-100 roof. The house also features extensive water conservation features including a large rainwater collection tank.

Site #3 – The Mill Creek Net Zero House. 9805 - 84 Avenue, Edmonton

This is a home that produces more energy than it consumes in a year. This house was completed last year and features a passive solar design with solar electric and solar thermal panels to gather energy. The solar electric panels are on movable awnings that shade the windows in summer to cool the house and then retract in the winter to let in the sun's heat.

Site #4 – Bellgravia Green. 11536 -74 Avenue, Edmonton

This is a housing development with three houses side-by-side. Each house uses energy efficiency technologies in a different way. In this case there is a Net Zero house, a Near Net Zero house, and a geothermal heated house with an Energuide rating of 90. These three houses will be under construction on the tour so many of the features will be visible.

Site #5 – Beverly Heights Near Net Zero house. 3626 Ada Blvd, Edmonton

Currently under construction this unique house is very narrow and tall to reduce its coverage of the lot and to maximize its collection of the sun. The house has a passive solar and daylighting design that uses the sun to heat and light all rooms. The small footprint allows the owners to plan for an edible landscape. This house design is currently near net zero; the addition of more solar panels in the future will allow it to become net zero.

Site #6 – Windsor Park Net Zero House. 8340 – 120 Street, Edmonton

This is a home that is still under construction. This energy efficient home was being built to an Energuide 86 standard. What makes this house truly interesting is that once you get to a certain standard in energy efficiency the step to net zero can be a smaller one than we think. In this case the addition of a highly-efficient geothermal heat pump and a larger solar-electric system was all it took to take a nicely efficient house all the way to the net zero energy goal.

Site#7 – Dusseault Naturalized Landscaping. 14011 – 91 Avenue, Edmonton

In this project the homeowners upgraded the 1958 era landscaping in front of their house to a more natural, water efficient, lower maintenance design. The homeowners will describe how they decided on the overall design and the selection and location of the plants and other features.