

## **Green Newton** 20 Green Features of the Model House

Solar Panels



Rooftop solar panels harness the sun's energy to generate 80% to 100% of the electrical needs for a typical home, and can generally pay for themselves in 6-8 years.

Compost Tumbler and Recycling Bin



Compost tumblers are used to convert organic waste like food scraps and leaves into compost. They can be rotated to easily mix the contents and speed the process of composting.

**Battery Wall** 



A battery wall can be used to store excess electricity from solar panels, and can provide power when the sun is not shining and also in case the electrical grid fails.

**Battery Electric Lawnmower** 



Battery operated electric lawn mowers are more convenient, less noisy, and produce no harmful emissions as compared to gaspowered lawn mowers. And there is no electric cord to run over.

Heat Pump Compressor (Outside)



compressor works with the heating/cooling system to move warm air from the outside to the inside during winter, and from the inside to the outside during summer.

The outdoor Heat Pump

Vegetable Garden



Having a vegetable garden allows you to grow delicious food without pesticides and chemicals, and you don't contribute to the unnecessary water and air pollution created by farming.

Heat Pump Air Handlers (Inside)



Heat Pump air handlers (also called "mini-splits") are placed in large areas to allow warm air to heat the rooms in the winter and to allow cold air to cool the rooms in the summer.

**Electric and Standard Bikes** 



Standard bikes are a great way to get exercise and do less damage to road surfaces than cars. Electric bikes produce no emissions and allow you to navigate hills easier. More bikes and fewer cars reduce congestion and reduce harmful emissions.

Insulated Attic



Microwave and Induction Cooktop

Attic insulation is used to prevent heat from escaping outside in the winter, lowering the cost of heating the home. In the summer, it helps keep warmer air from entering the home, saving on air conditioning costs and keeping the house cool.

Microwave ovens and induction cooktops use electricity instead of burning fossil fuels to heat food. They are much more efficient than gas or standard electric ovens.

Heat Pump Washer/Dryer



Heat Pump Water Heater



Heat Pump dryers are much more efficient than standard gas or electric dryers. They can also be combined with a washer to allow one appliance to both wash and dry, saving space and eliminating the need to move clothes from one machine to another.

Heat Pump water heaters are much more efficient than gas or standard electric water heaters. They take up no more space than a standard water heater, and produce no harmful emissions.

Super Insulated Walls



Wall insulation greatly improves the home's energy efficiency, allowing less fuel to be used to heat and cool the home. It also reduces noise transfer and can improve moisture control. Drip-Dry Laundry Line



Drying your clothes on a line eliminates the need to use fuel, and avoids damage to clothing from heat and tumbling. In the summer, this can be done outdoors relatively quickly and leaves your clothes smelling fresh.

Super Insulated Door and Windows



Doors and windows that are properly insulated greatly improve the home's energy efficiency, allowing less fuel to be used to heat and cool the home. They also reduce noise transfer and can improve moisture control.

**Electric Vehicle and Charger** 



Electric vehicles are much simpler than gasoline powered cars. They have far less moving parts and need less maintenance. They produce no harmful emissions. Operating costs are decoupled from the unstable price of oil, making them cheaper to operate.

The Green Newton model house was built with 100% reclaimed wood, renewable energy, plant-based plastics, and love. This project was made possible by a grant from the Village Bank and the City of Newton. The creator of this model is Andrew Breithaupt.

Green Newton