Use energy-efficient lights. Compact fluorescent bulbs use 66% less energy and last 5000 hours, ten times longer than a regular (incandescent) bulb. Which means they save you a lot of money. Cold cathode lights use the same energy as compact fluorescents but last even longer, 25,000 hours and can be used both inside and outside. The newer bulbs are available to replace regular 20-25 watt bulbs and need to be ordered online (energylodger.com). If every US household replaced just one light bulb with a compact fluorescent or cold cathode bulb, it would prevent enough pollution to equal removing one million cars from the road. 1

2 Change your heating and cooling settings. Reduce your water heater temperature to between 115 and 120°F. Lower your thermostat to 68 degrees in the winter and turn it down at night. Raise it to no more than 78 degrees during the hottest part of the summer. Almost half the energy used in a home goes to heating and cooling. 2

Plug the gaps in your home that allow heat to escape. This could save up to 10% on utility bills. Install weather-stripping around exterior doors and windows. If the gap at the bottom of a door is high, install a door sweep. Use expanding foam to seal gaps around pipes that enter your house from the outside. Check the joints and insulation on the ducts of your heating/ventilation/air conditioning system. Fix any leaks with mastic spray sealant. If your water heater is wrapped in an insulation jacket, particularly if the unit is in an unheated area of the house. And definitely keep fireplace dampers closed when not in use! Recycle, yes, this oldie is still a goody. Make sure you have separate bins or boxes for recyclables to make it super easy for everyone. 35% of the waste in landfills is recyclable paper and boardpaper. Only 22% of glass waste is recycled. About 40% of aluminum is recycled. And recycle your food, too! Start a compost bin (or a worm bin) for all vegetable and garden waste. 10% of the waste in landfills is food. 5

Use no-VOC and low-VOC primers, paints, sealants, and carpets. Volatile Organic Compounds can irritate eyes and throat, cause headaches and fatigue, damage major organs, and cause cancer. AFM Satecoat is one company that makes only no and low-VOC products. They do cost a bit more, but it’s worth it for your health.

- WE’LL THROW IN AN EXTRA TIP FOR FREE! WHERE YOU LIVE HAS A BIG IMPACT ON THE ENVIRONMENT. For example, the Pacific Northwest doesn’t have a lot of high-recessed light fixtures. But in the South, it is a different story. If you live in a southern state, replace your high-recessed light fixtures with additional outdoor lighting fixtures. Low-flow showerheads and sink fixtures will save additional water, much of it hot water, which saves money! 6

THE NEXT STEP - BIGGER INVESTMENTS THAT SAVE THE EARTH WHILE SAVING YOU MONEY OVER TIME

Great insulation is the most cost-effective energy saver there is. No use getting fancy with things like solar panels if your home leaks energy! Try to get your attic insulation value up to R-50 and your walls up to R-30. Blowing in cellulose (made of recycled newspaper) is the best for insulating a closed wall. If you’re doing a big renovation or reno you could open up the wall you have two options. If you have limited space and need to keep the wall the same size, then isoclene is more environmentally-friendly than other options. Isoclene takes the insulating value of cellulose when not sprayed in. If you spray it in it only gets the same cellulose which is a better product because it’s recyclable. Which is cellulose is also the best option if you can increase the wall size to get the insulation value you want using cellulose rather than foam. Atlas Roofing also offers a polyisocyanurate board that is a good insulation and that is made with no ozone-depleting chemicals. You should replace older windows with Energy Star windows (go for panes if you can) with a low-E coating. Pella Designer Series windows are currently the most energy-efficient windows that are widely available. Inefficient windows and doors cost Americans $40 billion each year in higher utilities costs and waste as much energy as the US gets from the Alaska Pipeline. 4

When you replace old appliances and water heaters, be sure to replace them with Energy Star models with the Energy Star symbol. They use 10-50% less energy than a standard appliance and can save about $80/year. If just 1 in 10 homes used Energy Star appliances, the change would be like planting 1.7 million new acres of trees. 5

Install Energy Star ceiling fans. Cassablanca is a brand that offers a wide variety of quality fans. This will cut down on costs by circulating heat in the winter and cooling air in the summer.

Install solar panels – and leave out the batteries! Solar panels can help you avoid the massive environmental and social ills of coal, nuclear, natural gas, and hydro. New York State will pay you half the bill, and New York allows you to “Net Meter”. That means you stay connected to the electrical grid and any time you produce more electricity than you use, it gets sold back into the grid for someone else to use and your meter runs backward – so you’re part of helping provide clean energy to your neighbors. Then when you need more than your panels produce, you draw from the grid like normal. This allows you to not use batteries, they are not so good for the environment, add a lot to the cost, and can only store so much energy before any extra is just lost.

Install geothermal heating and cooling. A geothermal system uses the earth’s constant underground temperature to cool and heat your home, as well as provide all of your home’s hot water. It uses about 50% less energy to heat your home and about 25% less to cool it.

SOME THINGS THAT JUST COST MONEY TO DO RIGHT - BUT DO THEM ANYWAY!

11 Replace your toilets with “dual flushers”. 40% of the water used in a home goes right down the toilet. Dual-toilet flushes let you choose whether you need a big or a little flush. This simple choice saves at least 6,000 gallons of water per year for a family of four. In any bathroom, that’s 25,000 gallons a year. Low-flow showerheads and sink fixtures will save additional water, much of it hot water, which saves money! 6

12 Buy green power or offset your carbon emissions. In New York State you can choose who supplies you electricity and then choose a green power company that provides power generated from highly recycled material, help to deflect heat in the summer, and are recyclable. Asphalt shingles are short-lived, made of oil, are rarely recycled, and look toxic, and they can be thrown into the trash. If you have to go with asphalt, make sure you go with 50-year asphalt shingles with recycled content. Regardless, never drink water coming off an asphalt roof.

14 If you are re-siding your house, do not use vinyl (PVC) siding. Dioxins are byproducts of PVC. They also happen to be the most toxic synthetic substance known to be carcinogenic, neurological damage, birth defects, and more. In the US, PVC is manufactured predominantly near low-income communities in Texas and Louisiana. Due to illegal dumping, mishandling, and burning, dioxins are now found all around the world – they are even detectable in our bodies. Dioxin exposure of the average American poses a risk of cancer greater than 1 in 1,000. PVC releasable gas causes cases in fires, including one that turns hydrochloric acid if ignited. PVC is not biodegradable and less than 1% can be recycled. Powerful information about alternatives can be found at www.healthbybuilding.net/ pvc/index.html

15 Whenever you do renovation work, be sure to buy FSC-certified wood. The Forest Stewardship Council provides independent audits that assure the wood you buy was not stolen from protected lands or lands of indigenous people without their consent. The FSC label also means wood was not taken from fragile ecosystems, that it was harvested sustainably, and that local communities benefit from the process. Sadly, all too often wood without the FSC symbol was clear-cut, or stolen from protected or sensitive lands, or from lands of indigenous people, and more.