

## Chronicle of Home Energy-Saving Features

Introduction – This is a list of energy-saving measures that I have installed/instituted in our household. Our energy use today is less than half of what it was when we purchased the house in 1989. It must also be noted that we are now empty nesters since our 4 children have left.

Appliance/Process		Technical	Comments
Programmable thermostat	'89		Heat(day 67° – night 62°), furnace rarely runs at night & it takes all night to drop to 62°. AC (day 79°, eve 78°, night 80°)
Gas furnace	'95		93% efficient
AC	'91		High efficiency
Installed water heater. Set temperature to warm.	'04		Higher insulation
Replaced 18 incandescent with CFL & LED bulbs	'05- >	60W→18W	
Installed styrofoam insulation during basement remodel	'89	R-5	
Insulated the sill plate above the foundation	'89	R-20	
Increase attic insulation – cellulose	'90	R20	Original insulation was only ~3"
Installed baffles(Styrofoam chutes from soffit->attic) for ventilation	'08		Air flow in attic helps keep house cool in summer & prevent condensation
Increase attic insulation – cellulose	'08	R20+	Old insulation had been compressed due to rewiring
Repaired fallen attic insulation above the stairs	'08		The original insulation was installed over a sheet of cardboard which had collapsed. Stair ceiling & wall had no insulation.
Added cellulose insulation above garage ceiling	'08		Helps keep garage/workshop above freezing.
Installed 1" foam insulation between garage attic & house sidewall	'09		Easy access allowed increased sidewall insulation.
Installed new roof & soffit vents	'07		Air flow in attic helps keep house cool in summer & prevent condensation
Installed 2- Double-glazed Pella patio doors	'99		Replaced leaky windows.
Installed 17 - Double-glazed replacement windows	'07		Improved R value, decreased air infiltration, & decreased heat radiation. Easy opening & closing facilitates managing natural air flow.
Installed insulated Front entry door, storm door, & double pane side lites	'07		Replaced thin, warped front door.

Installed new insulated garage door	'08		Attached garage never gets below freezing
Insulated the foundation walls in the crawl space beneath the family room	'09	R-15	Family room is more comfortable
Insulated the foundation walls beneath the front porch when we replaced the deteriorated front stoop.	'07	R-30	Old front stoop was over an empty pit. Placed 2" R25 foundation insulation before backfilling.
Insulated the outside exposed foundation with stucco-finished insulation board	'09	R-7, 2' x 4' sheets	Installed while reworking landscaping flower beds.
Resided the house sidewalls with foam backed siding.		Tyvec + R-5 backed vinyl siding	Improved home appearance & value. No painting is necessary.
New refrigerator	'07		Larger, more convenient fridge uses only ~ ½ energy of previous 15 yr old model we inherited.
Eliminated DVR & Direct TV → Antenna			DVR was always on & using as much electricity as the fridge. Fits our viewing preferences. Free TV .
Installed fans in upper bedrooms	'92		More comfortable at night. Decreases AC use.
Floor fans			Decrease AC use.
Water-saving showerheads	'89		These conserve both water & hot water
Terminal power strips (Computer, entertainment center, workshop)	'92		One switch ensures that plugged in appliances are entirely off.
LED, motion-sensor night lights hallway & bathrooms	'07		Safety at night & conserving.
Motion sensor controlled light in garage-house entry	'08		Convenient to have lights on when entering house while carrying items. Ensures lights are turned off after exiting.
Wrapped foam insulation around hot and cold water pipes in basement	'97		Less water is wasted while waiting for the hot water to reach the faucet. Don't have sweating pipes in summer.
Planted shade tree on the SE side of the house	'93		40' tree shades our house and porch for ½ of the day