



Home Energy Audit

conducted for

Jonas Daltry

Conducted on

01 Mar 2019 03:14 PM

Prepared by

Floyd McManus

Completed on



01 Mar 2019 04:33 PM



Score

28/38.0 - 73.68%

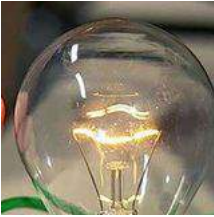
Failed Responses


This section lists responses that were set as "failed responses" in the template used for this audit


Question	Response	Details
Garage	Inefficient	A tungsten light bulb is still being used in the garage. This should be replaced by energy efficient alternatives such as CFLs or LEDs since this consumes plenty of power.
<div data-bbox="92 555 306 770" style="text-align: center;">  </div> <div data-bbox="140 779 255 801" style="text-align: center;">Appendix 1</div>		
Basement	Inefficient	An incandescent light bulb is still being used in the basement. I recommend to have it replaced with CFL or LED bulbs since these are more efficient.
Attic	Inefficient	An incandescent bulb is still used as the main light source, same as with the garage and basement. Have it replaced with CFL or LED bulbs to reduce energy costs.
Air conditioner	Inefficient	The air conditioner in the living room is an old unit of more than 10 years old. The air filter seems to have been clogged for some time now and there are signs of compressor damage. A new air conditioner with Energy Star certification would be more efficient in this case.
<div data-bbox="92 1527 306 1742" style="text-align: center;">  </div> <div data-bbox="140 1751 255 1774" style="text-align: center;">Appendix 2</div>		


Question	Response	Details
TV set	Inefficient	An old CRT TV is still used regularly in one bedroom. I would recommend to have it replaced with a LED TV since CRTs are inefficient and would cost more longterm.
 <p data-bbox="140 611 256 638">Appendix 3</p>		
Attic	Inefficient	Attic is improperly insulated with fiberglass batts. Spray foam is the best option for attic insulation. I would recommend to get a professional to install closed-cell spray foam if the budget will allow. If not, open-cell spray foam is more affordable and is also effective if installed properly.
 <p data-bbox="140 1232 256 1258">Appendix 4</p>		
Are appliances and equipment turned off and unplugged when not in use?	No	Computers are kept running 24/7. Only computer monitors are turned off. TV sets, air conditioners, and microwave ovens are kept plugged in even when not in use.
Are lights turned off at the end of the day?	No	Porch, yard, and living room lights stay on even when everyone is asleep.
Are doors and windows closed when the air conditioner/heater is working?	No	Only the screen on the front door is closed which does not prevent cold from leaving the house.
Is it possible to switch to solar energy?	No	Solar panels are not within the family's budget at this time.


Inspection - 28/38 73.68%

Question	Response	Details
Equipment & Appliances		Score (10/13) 76.92%
<p>Instructions:</p> <p>1. Based on inspection, select whether an equipment or appliance is "efficient" or "inefficient".</p> <p>2. Include notes to explain your findings and recommendations to improve efficiency and reduce energy costs.</p> <p>Check lighting systems, HVAC Systems, and Electrical Appliances for energy efficiency, and recommend possible improvements to cut energy costs.</p>		
Lighting Systems - External		Score (2/3) 66.67%
Porch	Efficient	
Garage	Inefficient	A tungsten light bulb is still being used in the garage. This should be replaced by energy efficient alternatives such as CFLs or LEDs since this consumes plenty of power.
 <p>Appendix 1</p>		
Yard	Efficient	
Notes	The porch and yard lighting systems have recently been updated to use energy efficient LED bulbs. The garage, however, still uses a tungsten bulb. It's better to use CFL or LED bulbs to save more on electrical bills.	
Lighting Systems - Internal		Score (8/10) 80.00%
Living room	Efficient	
Dining room	Efficient	
Kitchen	Efficient	
Basement	Inefficient	An incandescent light bulb is still being used in the basement. I recommend to have it replaced with CFL or LED bulbs since these are more efficient.

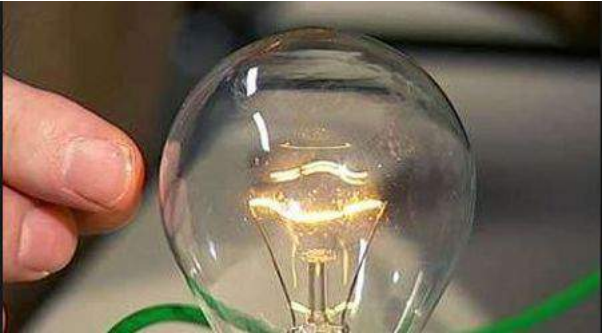
Question	Response	Details
Attic	Inefficient	An incandescent bulb is still used as the main light source, same as with the garage and basement. Have it replaced with CFL or LED bulbs to reduce energy costs.
Master bedroom	Efficient	
Master bathroom	Efficient	
Bedroom 2	Efficient	
Bedroom 3	Efficient	
Bathroom	Efficient	
Notes		Lighting systems are mostly the recommended linear fluorescent and CFLs. Areas that aren't easily accessible by guests such as the attic and basement, however, are still utilizing incandescent light bulbs. Replace these with CFL or LED bulbs to reduce overall energy costs.
Heating, Ventilation, and Air Conditioning (HVAC)		Score (1/2) 50.00%
Air conditioner	Inefficient	The air conditioner in the living room is an old unit of more than 10 years old. The air filter seems to have been clogged for some time now and there are signs of compressor damage. A new air conditioner with Energy Star certification would be more efficient in this case.
 <p>Appendix 2</p>		
Furnace	Efficient	
Notes		The air conditioner in the living room needs replacement. The air conditioner in the master bedroom is relatively new and is in good condition.

Question	Response	Details
Electrical Appliances		Score (11/12) 91.67%
TV set	Inefficient	An old CRT TV is still used regularly in one bedroom. I would recommend to have it replaced with a LED TV since CRTs are inefficient and would cost more longterm.
<div data-bbox="92 465 308 678" style="float: left; margin-right: 10px;">  </div> <div data-bbox="140 685 256 712">Appendix 3</div>		
Computer CPU	Efficient	
Computer monitor	Efficient	
Ceiling fan	Efficient	
Refrigerator	Efficient	
Microwave	Efficient	
Coffee maker	Efficient	
Toaster	Efficient	
Clothes dryer	Efficient	
Dishwasher	Efficient	
Iron	Efficient	
Vacuum cleaner	Efficient	
Notes	Most of the electrical appliances are in good condition and are relatively efficient. One bedroom still uses a CRT TV daily which should be replaced with LED to save more longterm. Responsible use of even energy efficient equipment is essential to maximize savings.	
Home Composition		Score (4/5) 80.00%
Check for insulation and proper sealing.		
Windows	Efficient	
Roofing	Efficient	

Question	Response	Details
Attic	Inefficient	Attic is improperly insulated with fiberglass batts. Spray foam is the best option for attic insulation. I would recommend to get a professional to install closed-cell spray foam if the budget will allow. If not, open-cell spray foam is more affordable and is also effective if installed properly.
 <p>Appendix 4</p>		
Doors	Efficient	
Walls	Efficient	
Notes	Overall, the house has good insulation installed. The attic, however, is insulated poorly with fiberglass batts. Spray foam insulation should be done by a professional.	
Energy Consumption Habits		Score (2/6) 33.33%
Are appliances and equipment turned off and unplugged when not in use?	No	Computers are kept running 24/7. Only computer monitors are turned off. TV sets, air conditioners, and microwave ovens are kept plugged in even when not in use.
Are some lights turned off in the daytime to take advantage of natural light?	Yes	
Are external lights turned off during daylight hours?	Yes	
Are lights turned off at the end of the day?	No	Porch, yard, and living room lights stay on even when everyone is asleep.
Are doors and windows closed when the air conditioner/heater is working?	No	Only the screen on the front door is closed which does not prevent cold from leaving the house.
Is it possible to switch to solar energy?	No	Solar panels are not within the family's budget at this time.

Question	Response	Details	
Notes	Unplug appliances that are not in use to maximize energy saving. Items on "standby mode" consume energy continuously. Turn off lights in unoccupied rooms and close doors and windows where cooling or heating systems are working to prevent cold or heat loss. Solar panels are expensive upfront, but can offer big savings longterm.		
Findings and Recommendations			
Summary Report	Overall, most of the equipment and appliances in the house are reasonably efficient. A few heavy use items, however (CRT TV, incandescent bulbs, old air conditioner) need replacement asap to save in longterm energy expenses. Insulate the attic with spray foam and have a professional install it. Observe best practices such as unplugging unused appliances and turning off lights in unoccupied rooms to reduce energy expenses.		
Name and Signature of auditor	Floyd McManus		

Media



Appendix 1



Appendix 2



Appendix 3



Appendix 4