



Home Energy Audit

Jonas Daltry / Floyd McManus / 4 May 2023

Complete

Score	73.68%	Flagged items	10	Actions	0
Site conducted					Unanswered
Client / Site					Jonas Daltry
Conducted on					04.05.2023 15:15 PST
Prepared by					Floyd McManus

Flagged items

10 flagged

Inspection / Equipment & Appliances / Lighting Systems - External

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.



Photo 1

Inspection / Equipment & Appliances / Lighting Systems - Internal

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.

Inspection / Equipment & Appliances / Lighting Systems - Internal

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.

Inspection / Heating, Ventilation, and Air Conditioning (HVAC)

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.



Photo 2

Inspection / Electrical Appliances

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.



Photo 3

Inspection / Home Composition

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.



Photo 4

Inspection / Energy Consumption Habits

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.

Inspection / Energy Consumption Habits

Are lights turned off at the end of the day?

No

Porch, yard, and living room lights stay on even when everyone is asleep.

Inspection / Energy Consumption Habits

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.

Inspection / Energy Consumption Habits

Is it possible to switch to solar energy?

No

Solar panels are not within the family's budget at this time.

Inspection

10 flagged, 73.68%

Equipment & Appliances

3 flagged, 76.92%

Instructions:

1. Based on inspection, select whether an equipment or appliance is "efficient" or "inefficient".
2. Include notes to explain your findings and recommendations to improve efficiency and reduce energy costs.

Check lighting systems, HVAC Systems, and Electrical Appliances for energy efficiency, and recommend possible improvements to cut energy costs.

Lighting Systems - External

1 flagged, 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.



Photo 1

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

2 flagged, 80%

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.

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)

1 flagged, 50%

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.

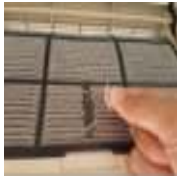


Photo 2

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.

Electrical Appliances

1 flagged, 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.



Photo 3

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

1 flagged, 80%

Check for insulation and proper sealing.

Windows	Efficient
Roofing	Efficient
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.



Photo 4

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

4 flagged, 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.

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
04.05.2023 15:21 PST

Media summary



Photo 1



Photo 2



Photo 3



Photo 4