DIOCESE OF NIAGARA - Parish Energy Audit

Please email a completed audit to d.carson@sympatico.ca
If you have questions, please contact the same email.

Parish Name: _____

Address: _____

Date: _____

Group / Committee in charge of Audit: _____

Contact Name: _____

Email: _____ **Phone: _____**

Section 1 - Building Information

A spreadsheet tool will be provided for the calculations in the grey area.

	Square Feet (Approximate)	Days / Week Occupied	% of Square Feet	% Occupied
Total				
Sanctuary				
Narthex				
Offices				
Classrooms / Meeting Rooms				
Kitchen				
Basement				
Other				
Overall Occupancy	Sum of Columns 2 times 4			

Section 2 - Energy Consumption

Please provide data from the past 12 months. A spreadsheet will be provided for the calculations (grey shaded areas).

Year: 2021

Month	Gas Consumed (m3)		Electricity Consumed (kWh)	Total		Occupied	
	m3	KG CO2 Produced[1.]		Gas / Ft2	Electricity / Ft2	Gas / Ft2	Electricity / Ft2
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
Total							

1. Multiply m3 gas times 1.9239 to get kg CO2

Top Potential Actions to Increase Electrification and Reduce CO2?

1. _____
2. _____
3. _____
4. _____

Parish Name: _____

Year: 2022 or _____

Month	Gas Consumed (m3)		Electricity Consumed (kWh)	Total		Occupied	
	m3	KG CO2 Produced[1.]		Gas / Ft2	Electricity / Ft2	Gas / Ft2	Electricity / Ft2
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
Total							

1. Multiply m3 gas times 1.9239 to get kg CO2

Section 3 - Heating Sources

Check All That Apply
(Complete top row only if only one type of heat)

	Natural Gas	Year installed?	Electric Baseboard	Gas Boiler or Oil	Heat Pump	Smart Thermostat? (Y or N)	Set Back When Not Occupied? (Y or N)
Sanctuary							
Narthex							
Offices							
Classrooms / Meeting Rooms							
Kitchen							
Basement							
Other							

Water Heating	Gas	Electric	Pipes Sufficiently Insulated?
Tank #1			
Tank #2 (if applicable)			

Is there a timeframe for upgrading all or some heating to a heat pump?
If gas water heating is used, is electric an option? Other opportunities?

_____

_____

Section 4 – Air Tightness and Heat Loss

More than insulation, air tightness is one of the largest areas for reducing heating and cooling needs.

	Exterior Doors		Windows		Other
	Number of Exterior Doors	Quality of Door Seal (Good/Medium/Poor)	Number of Windows	Quality of Window Seal (Good/Medium/Poor)	Other Areas with air tightness concerns (see below)?
Sanctuary					
Narthex					
Offices					
Classrooms / Meeting Rooms					
Kitchen					
Basement					
Other					

Examples of other areas could be:

- ceiling ventillation fans in bathroomand kitchen areas. Is there a large cold air backflow? Is there a proper flap installed on the exterior vent?
- laundry vents - are they properly sealed? ; Any unsealed areas around window air conditioners?

Top opportunities for efficiency and to reduce heat loss

1. _____
2. _____
3. _____
4. _____

Section 5 – Insulation and Lighting

	Lighting			Insulation
	# Lights* (a lot or a few?)	% LED or High Efficiency	Off When Unoccupied?	Ceiling Insulation (Good/Medium/Poor or N/A)
Sanctuary				
Narthex				
Offices				
Classrooms / Meeting Rooms				
Kitchen				
Basement				
Other				

* The number lights is asked only to assess the opportunity.

Are Exit lights all LED _____

Is anything left "on" when it can be turned "Off" _____

Top Potential Actions for Energy Efficiency

1. _____
2. _____
3. _____
4. _____

Other Questions:

Kitchen

Type of Stove: _____ If gas, does it have a permanent pilot light? (Y / N)

Approximate age of appliances:

Stove _____

Refrigerator _____

Dishwasher _____

Freezer _____

Interesting Facts:

1. A typical vehicle driven average kilometers produces around 4 tonnes of CO2 emissions per year.
2. A gas furnace in an average home in Ontario emits approximately 3.5 to 4 tonnes per year of CO2 emissions.
3. Each litre of gas that is burned produces about 2.2 kg of CO2.
4. A cubic meter of natural gas produces about 1.9 kg of CO2.
5. A gas hot water tank for an average family emits about 1 tonne of CO2 per year.
6. In Ontario, most overnight electricity is almost carbon free, but incremental demand during the day is met with natural gas generating plants. Switching electricity load to later in the evening is a good way to reduce emissions.