DIOCESE OF NIAGARA - Parish Energy Audit



Please email a completed audit to <u>d.carson@sympatico.ca</u> 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				

Section 2 - Energy Consumption

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

	Gas Con	Gas Consumed (m3)		Тс	otal	Occupied		
Month	m3	KG CO2 Produced ^{1.}	Consumed (kWh)	Gas / Ft2	Electricity / Ft2	Gas / Ft2	Electricity / Ft2	
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
Total								

<u>Year: 2021</u>

1. Multiply m3 gas times 1.9239 to get kg CO2

Top Potential Actions to Increase Electrification and Reduce CO2?

1.	
2.	
3.	
4.	

Year: 2022 or _____

	Gas Consumed (m3)		Electricity	Тс	otal	Occupied		
Month	m3	KG CO2 Produced ^{1.}	Consumed (kWh)	Gas / Ft2	Electricity / Ft2	Gas / Ft2	Electricity / Ft2	
January								
February								
March								
April								
Мау								
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)

	(Setting)	Ken list	Electric D	Ges Boy	Heat Dury	Smalt Memor	Set Back Wiren	M. Jon J. Co.
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.

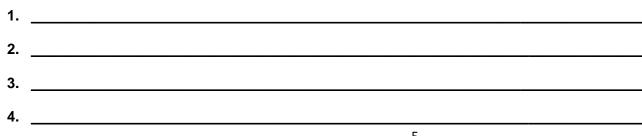
	Exte	rior Doors	w	lindows	Other
	Number of Exterior Doors	Quality of Door Seal (Good/Medium/Poor)	Number of Windows	Quality of Window Seal (Good/Medium/Poor)	Other Areas with air tightness concerns (see below)?
Sanctuary					
Narthex					
Offices					
Classrooms / Meeting Rooms					
Kitchen					
Basement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



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.