# Parish Center HVAC

July 2024



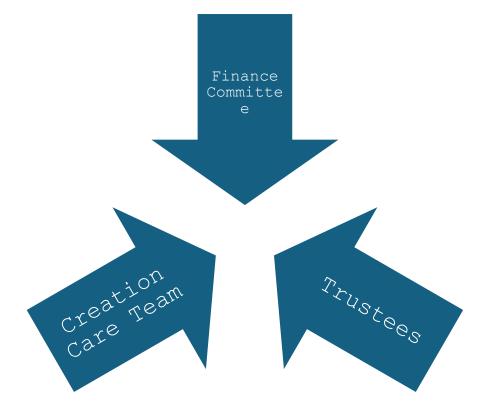
### Parish Center

- 1.Our most used building
  - Father's Residence
  - Catherines Cupboard
  - Religious Education Office
  - Administration Offices



### Our Team

#### Parish



### Outside Consultants

- Metro IAF
- Taitem Engineering
- Contractors
  - Bryant Heating/Cooling
  - The Ductless Company
  - SureTemp
  - Auchinachie

### Current HVAC System Heat

Crane gas fired boiler built in 1960



Cooling

Window units throughout the building





# Project Goals

Goal Number 1 Goal Number 2 Install an effective and efficient heating & cooling system

Install a system that will reduce our use of fossil fuels. (lower our carbon footprint)



# Design Options

- 1. Option 1: Fully Electric heating & cooling
- 2. Option 2: Electric heating & cooling with boiler back-up in the really cold weather.
- 3. Option 3: Mainly boiler heat with electric back-up and electric cooling.
- 4. Option 4: Boiler heat with electric cooling

Design considera tion

Effectiveness & Efficiency

Carbon Footprint reduction

Ease of Operation

Ease of Maintenance

Cost

Clean
Heat &
NYSERDA
Incentive
s

### Clean Heat

•\$25,000 to \$30,000

### NYSERDA

•\$37,000

	Gross Cost	Clean Heat Incentive Amount	Metro IAF Incentive Amount	Net Cost
1	\$201,050*	\$33,460	\$35 <b>,</b> 850	\$131,74 0
2	\$189 <b>,</b> 050*	\$27,864	\$35,850	\$146,33 6
3	\$209 <b>,</b> 050*	0	0	\$209,05 0
4	\$114,050	0	0	\$ 114,050

# Cost Considerations

- Gross Cost includes:
- 1. Conversion from 200 to 400 amp service
- 2. electrical cost for wiring the air handlers (\$20K for option 1; \$15k for options 2#3)
- 3. boiler installation in options 2,3 & 4)

## Option 2

#### **POSITIVES**

- Efficiency/Effectivene ss
- Flexibility
- Customizable
- Significant GHG reduction
- Ability to delay cost
- Overall cost

#### **NEGATIVES**

- Significant amount of equipment
- Equipment maintenance
- Use of natural gas in the coldest months.