# Mascoma Valley Regional School District

#### Mascoma Valley Regional School District - SAU 62 Mascoma Inspires! Build the Path You Want to Take.

M



Canaan Elementary School









Mas

Mascoma High School

Mechanical ventilation and filtration is entirely absent from several of our schools, our heating systems cannot sufficiently reach our buildings' extremities, and all but one of our buildings' control systems are limited to monitoring for alarms in the heating system. We have financial limitations, but we also lack expertise and guidance. The Energy Class Prize would help us shine a light into an area where we are currently in the dark and floundering. Our team is composed of members from all levels of the organization - staff, faculty, administrators, and school board representatives - all with a deeply vested interest in our students and their learning environment.

Corrado Paramithiotti has diligently served the Mascoma School District for the past three years as its Director of Facilities. He has brought a wealth of experience to this role and is ready to do the same in his new role as Energy Champion.

# Mascoma Valley School District









- Enfield Village Elementary School (Top left)
- Mascoma Valley Regional High School (Top right)
- Indian River Middle School (Bottom left)
- Canaan Elementary School (Bottom right)

## Mascoma Valley School District

Our school District is in the Upper Valley region of New Hampshire.

The four schools are in Enfield and Canaan at a distance of 14 miles from each other.





- The Energy Class Prize provided the tools to identify new and existing processes, activities and items which can be targeted for sustainability improvements and energy savings;
- Because of the Energy Class Prize, we have developed a basic sustainability plan which identifies action steps for successive fiscal cycles implementation;
- The Energy Class Prize grant also helped establish a sustainability fund which will fund energy and sustainable projects over successive fiscal cycles;



- Current successes are:
  - LED retrofit to one elementary school generating up to 20% energy savings from its current consumption;
  - Obtained a further local utilities rebate after the retrofit;
  - Windows sealing at the middle school, closing the building envelope and making it more comfortable;
  - Identified two other school buildings (Enfield Elementary and Indian River Middle School) for an LED retrofit;

### Phase II

## The SAU Building Office



The 2,246 sq.ft. SAU building was built in the early 1990's with standard 2 x 6 frame and vaulted ceilings;

HVAC equipment includes a propane heating system and electric a/c;

The walls have fiberglass insulation;

The ceilings have original insulation which falls short of the current Energy Star recommendation of R49 for zone 6; Proposal includes attic insulation upgrades; The estimated costs for install are based on industry averages of between \$7,500 and \$12,500 including labor and materials;

Reduce the overall Energy Use Index as compared to the other buildings as shown in Table 1

#### Table 1: Mascoma Energy Use Intensity by Building



- Further scope of work advocates for a review of the HVAC system including a potential building controls addition;
  - Also looking at the install of a ground mounted solar array to match and offset the electrical consumption of the building with a preliminary cost of \$128,000 before rebates and incentives;
  - Energy savings developed would then fund the sustainability fund created during this fiscal cycle for further investment into other identified projects;

# The Timeline for this project

Fast tracking this project based on the Phase II funding awards would allow implementation of the scope of work. The challenge would be subcontractors' schedules.

insulati project	RFP for insulation project June-July 2024		HVAC review with upgrades recommend ations summer 2024		Solar array project review and final pricing fall 2024	
	Summer 2024		Summer 2024		2024–2025	
June–July 2024		Summer 2024		Fall 2024		
	-			Fall	2024	