

4. Improvement Projects to Include in Financial Model and Campaign, 03/03/2021

Type of Project	Bldg/Rm	Project
<p>These projects are discrete and self-contained, without significant dependencies on other projects or decisions, and can be implemented within months of being funded. They have reliable cost estimates which are modest enough to fit within the current Capital Fund Campaign. They are energy-efficient and can reduce our carbon footprint. Their benefits are easy to understand and they resonate positively with the Congregation.</p>		
Interior systems	Chapel	<p>Installing ecological cooling and heating for the Chapel and Frances White Room. The immediate benefit of this project is to provide comfortable temperature and humidity in the Chapel in the summer, which will greatly improve its use for summer Worship Services, as well as other uses by the Congregation and community and rental groups including meetings, weddings and other social events and performances. A modern "mini-split" ductless systems uses air source heat pump technology to cool or heat the space. It uses less energy than conventional air conditioning systems. In heating mode, it reduces our fossil fuel consumption because it replaces the current steam radiator heat that is fueled by natural gas, with electricity that First Unitarian will obtain from a collaborative or supplier that generates power only from renewable sources. Extending the system to the Frances White Room (FWR) will provide the same benefits there, and additionally will reduce demand on the less ecological conventional central air conditioning system that currently provides cooling to the daycare classrooms that spills over into the FWR. A mini-split system in the Chapel and FWR will introduce First Unitarian to ecological heat pump technology; a larger Variable Refrigerant Flow (VRF) system using similar technology could later replace conventional heating and cooling throughout 50 Monroe (see "6. Three Potential Improvement Projects to Evaluate in FY21-22"). Based on two estimates, we expect the cost to be no more than \$50,000, which can fit within the current Capital Fund Campaign. Congregants easily understand and support the benefits of this project.</p>
Interior systems	48 Monroe	<p>Solar panels on 48 Monroe: The Green Team is exploring the potential costs and benefits to install solar panels on the flat roof of 48 Monroe to generate electric power. A general evaluation by Solar One estimated that installing 8 panels there, each generating 315 Watts, would cost about \$16,000 after NYS incentives. The Green Team has now obtained a more precise estimate from an installer, for a system with 13 panels, each generating 360 Watts, at a cost of \$20,000 after NYS and NYC incentives. The feasibility analysis will also address compliance with Landmarks requirements and the ability of the roof to support the panels. Because First Unitarian is not eligible for federal and state income tax incentives, the payback period is likely to be longer than typically experienced by homeowners and businesses. Installing solar panels on the only suitable surface of our property sends an important message about our commitment to renewable energy. It can be included in the current Capital Fund Campaign, resonates well with the Congregation, and is consistent with our values. In addition, the Congregation will continue to obtain power from a supplier that generates electricity only from renewable resources, for our needs beyond what these panels will generate.</p>