

## **Savings Through Energy Management (STEM) For This Old House of Worship**

### Objectives:

- To assist faith communities to be good stewards of the earth
- To identify ways to save energy and dollars in faith community buildings

STEM for This Old House of Worship program has four major components:

- a) Fifteen hours of instruction for participants from five or more faith communities
- b) Preparation and presentation of report to the Trustees of each faith community
- c) Establishment of an ongoing energy conservation/management program
- d) Provide resources for on-going projects and upgrades, including state incentives.

### Session I - Introduction

- Reasons to save energy
- Overview of regional, national and global energy consumption
- Non-renewable and renewable energy sources
- Potential for saving energy and dollars and reducing CO<sub>2</sub> emissions
- Building survey and walk through
- Calculation of savings in energy, fuel units, dollars and CO<sub>2</sub>

### Session II - Building heat problems

- Controls
- Distribution system
- Boiler/furnace
- Domestic hot water problems
- Calculation of savings in energy, fuel units, dollars and CO<sub>2</sub>

### Session III – Lighting, Appliances & Motors

- Calculation of savings in energy, fuel units, dollars and CO<sub>2</sub>

### Session IV - Building envelope problems

- Windows
- Walls
- Doors
- Ventilation
- Use of blueprints
- Finding R & U values
- Calculation of savings in energy, fuel units, dollars and CO<sub>2</sub>

### Session V - Deciphering energy bills

- Finding annual energy consumption (BTU/yr)
- Finding BTU/ft<sup>2</sup>
- Establishment of a system to monitor energy use
- Reporting energy problems, recommendations and estimated savings
- Sources of funding