

## Climate Small Group

### Toward a “greener” MZ

We were pleasantly surprised. While brainstorming during our first few months together about what we could do as a congregation and at home regarding climate and the environment, the participants of Mount Zion’s Climate Small Group learned that MZ has already made significant changes and researched others. Some of the efforts—switching to compostables, for instance— are visible. Some are quite behind the scenes. Here’s a rundown of what’s already happened through the leadership of Executive Director Larry Solomon and MZ’s Yarok (Green) Committee, which was formed in 2012.

### **Waste Reduction**

For the last three or four years, all waste at Mount Zion has been separated into compost, recyclables, and waste for the landfill. Mount Zion received a grant from Ramsey County for the purchase of receptacles for the three different types of waste. The grant also provided for training sessions for school ??? and staff in separating the items for waste removal, and paid for the first month of the three different pickups.

All cups, plates, and utensils used at congregational events are now compostable. In addition, special receptacles have been added to the bathrooms to collect paper towels so they’re composted rather than going to landfill.

### **Landscaping**

Although regular lawn maintenance continues, we no longer water the lawn, letting it turn brown in dry spells, conserving water use. Future plans with regard to landscaping include reseeding with drought-hardy grass and replacing some current plantings with native plants.

### **Energy Use Reduction**

- The dishwasher in the kitchen has been upgraded for greater efficiency.
- The large garage door facing the kitchen parking lot has been replaced with an insulated, heavy-duty door to reduce heat loss from this part of the building.
- Most light bulbs in the building have been replaced with energy efficient LED bulbs. In the main areas of Margolis Hall and the Sanctuary, however, the process is slowed because of unusual procedures--and costs--that our historically significant building requires. Each of the 18 large circular fixtures in these areas has 300 bulbs. When we first considered this project, the cost of LED bulbs was around \$10 per bulb, and the cost of replacing bulbs in a single fixture was around \$2,400. LED bulbs cost less now, putting this project more within reach. However, the beautiful vaulted ceiling in the Sanctuary requires the rental of a crane lift to access the fixtures, adding to the overall cost.
- In the office areas, the original lighting is fluorescent. To install LED bulbs, the fixtures must be refitted. **Larry is** looking into the possibility of financial assistance with this from Xcel energy.

## **Improving energy efficiency**

Energy efficiency is fundamental to climate change concerns, and is of great concern to us. Maintaining comfortable working and worshipping temperature in our building is a critical but mostly unnoticeable aspect of our energy consumption - at least until the temperature gets uncomfortable. The building is steam-hearted, and the boiler, which produces the steam, is more than 30 years old. It needs replacing. In addition, we need to upgrade our thermostat system, which is even more important for energy efficiency. Ours is 65 years old - quite outdated! A new digital system will enable temperature to be regulated room by room, depending on the activity in that room – when a room is in use the temperature can be adjusted upward. An engineering company has been engaged to assess our needs and evaluate the best way to make the changes, given the complicated use patterns of the building.

**Solar:** In thinking about energy use and climate change, one of the first things we think of is renewable energy, especially solar power. Installation of solar panels was one of the first projects considered by the Yarok Committee after its formation, and it has been re-evaluated about every five years.

There are complications with this project, as well. Because we are located on historic Summit Avenue, the Summit Avenue Residential Preservation Association has to approve all changes that affect the appearance of the building from the street. This is an obstacle that can be overcome but there are issues with the building as well. The flat roof of the education wing can accommodate solar

panels, but the roof would need to be reinforced to support them, adding about \$200,000 to the cost of the project. So far, the savings from capturing solar energy have been outweighed by the cost of the project. As solar energy technology advances we will likely continue to consider the addition of solar panels periodically.

However, estimates of how much energy could be captured by solar panels fall far short of Mount Zion's needs. We would still need to purchase about 70% of our power. Of course, this number may well change as we take steps to become more energy-efficient. In the meantime, we can also look into purchasing sustainably sourced energy –solar and/or wind power as opposed to fossil fuel-dependent power.

Doing some initial research on questions such as energy sourcing is one of the activities of the Climate Small Group. We are also looking into a resource fair for the congregation with ideas (that you may not have heard of!) for reducing energy use and plastics at home, education about climate issues, and projects around environmental issues in the community and at Mount Zion. We welcome everyone's participation and ideas!