

Brian Anderson

Topics

- Mount Olivet Solar
- Mount Olivet Lighting Projects
- Mount Olivet Composting
- Mount Olivet Community Garden
- Mount Olivet HVAC
- Plant-based Diet
- Electric Vehicles







Mount Olivet Solar

- New flat roof construction (required maintenance)
- 212 solar panels/123 Kilowatt
- LSS design/build/fund
- MO buys solar power from LSS for 8 years
- MO purchases solar panels for 5% of cost in Year 8







Roof replacement

- Flat part of roof was at end of service life and needed replacement
- An advanced, white colored roof material was used that reflects solar energy with two benefits:
 - Keeps the roof cooler to reduce air conditioning needs
 - Works with the bifacial solar panels to generate more electrical energy







Lighting Projects

- Parking Lot LED Lighting
- Lower Level LED Retrofits (Fluorescent lamp replacement)
- Sanctuary Lightning LED Retrofits
- Future LED Retrofits (rest of building)







Mount Olivet Commercial Composting

- Methane from landfills is a major source of GHG emissions.
- Commercial Composting keeps biological waste out of landfills where it would otherwise become methane.
- Plymouth and other cities have a commercial composting curbside service you can sign up for!







Mount Olivet Giving Garden

- Supplies community meal
- Eliminates transportation emissions (Eating locally sourced food)
- Increases availability of plantbased foods







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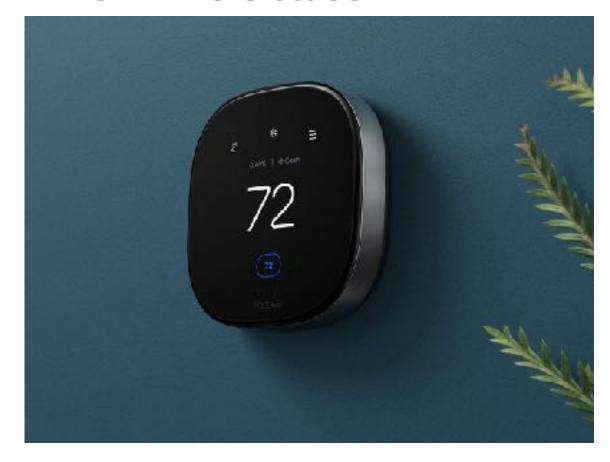






Mount Olivet Smart Thermostats

- Smart thermostats enable heating and cooling areas only when needed, saving energy
- Utilities can remotely control smart thermostats during the hottest hour of the year to peak shave grid loads; mitigating new power plant construction need
- Savings are passed on to customers







Mount Olivet HVAC (future)

- Currently heating with methane gas furnaces on roof and in basement
- Heat pumps are up to 4x more efficient and take advantage of cleaner grid electricity from renewables
- MOPLY participates in Xcel clean energy rate plan







Plant-based Diet

- Project Drawdown second
 (scenario I) or third (scenario 2)
 most effective climate change
 mitigation solution
- Win-win from improved health span and life span
- Delicious! Check out the vegan meal at 12pm in the Fireside Room







Electric Vehicles

- Transportation is the top CO₂e emissions source for Minnesota residents
- There are currently 69 models available from 30 different brands
- Charging at home means starting every day with a full battery



₱ 52,370 fast chargers at 12,400 locations in 50 states and in-car automatic routing mean road trips can be simpler than refueling with a gas car





Project Drawdown

- Contains a solutions library of the top 100 climate solutions that are
 - currently available,
 - growing in scale,
 - financially viable,
 - able to have a net positive impact,
 - quantifiable under different scenarios.
- Top two solutions (Scenario 1)
 - Reduced food waste
 - Plant rich diets











Our future's so bright, we gotta wear shades!







MOPLY Solar web page

https://www.moply.org/solar-at-mo





