Connect to the Grid: Solar at Your House of Worship

Rev. Brian Sauder, Executive Director

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Join the conversation

@faithinplace
Faith in Place’s Mission:

Faith in Place empowers Illinois people of all faiths to be leaders in caring for the Earth, providing resources to educate, connect, and advocate for healthier communities.

*Faith in Place is the proud Illinois Affiliate of Interfaith Power & Light.*
Our Model

**Educate**
faith partners on the ways to bring the message of environmental consciousness to their communities

**Connect**
faith communities to one another and to important resources such as funding and green experts

**Advocate**
with local and statewide environmental partners for accountability
Empowering Illinois people of all faiths to be leaders in caring for the Earth, providing resources to educate, connect, and advocate for healthier communities.
Our Organizing Model

Green Teams

Green Team Coach
Green Team Coaching

Green Teams are groups of 3 or more people from a house of worship who provide cooperative leadership to educate, connect, and advocate for healthier communities.

Faith in Place will provide you a Green Team Coach upon declaring yourself a Green Team. This coach will serve as a mentor to your group, and will keep you updated with programs and opportunities for Earth care in your area. They will reach out at least twice a month and attend your meetings and events as their availability allows. Coaches can help you create goals, and connect you to resources, all at no financial cost.

Read this PDF document for more information about Green Teams and Green Team Coaching.
2019 Green Team Coaching

- 110 Current Active Green Teams – all listed on Website
- Each Green Team Assigned Staff Coach
- Coach works with Green Teams minimum of twice per month to implement program
- Strategic Plan is to serve 250 active Green Teams by 2050
Faith in Place’s Programs

- Energy & Climate Change
- Sustainable Food & Land Use
- Water Preservation
- Advocacy
Connecting Energy & Environmental Justice

The Problems

- Fossil-fuel burning power plants exacerbate injustice in health outcomes (e.g. asthma) and GH gas.

- Climate change impacts (heat waves, droughts, floods) are disproportionately felt by those least able to respond.

- Illinois leads the country in fossil fuel burning plants located in communities of color.¹

- Asthma attacks:
  Children of color are 4X as likely to be hospitalized and 10X ten times as likely to die.²

Energy & Climate Change

Our Solution: Empower people of faith to conserve energy at homes and in houses of worship

Energy Audits & Building Retrofits  Solar House of Worship  Smart Energy Education
Connect to the Grid/Solar

- Begin at the Baseline
- Audit/ Retrofit Connections
- Incentives for Energy Saving Upgrades
- Solar Possibilities
- Solar Financing
- Ready to Power UP
The Journey to Become Energy Efficient

- Form a Green Team
- Utility Assessments
- Benchmarking
- Level 1 Energy Audit
- Transportation: Bike to Worship
- Level 2 & 3 Energy Audits & Retrofits
- Solar Panels
- Smart Energy Workshop
Connect to an Energy Audit

- Listening for Problems and Concerns
- A/C and Heat
- Lighting
- Water Heating
Opportunities to Capture Savings

- Smart Thermostats
- Replace Boilers
- Point of Use or Tankless Water Heaters
- Appropriate Sizing of Appliances
- Installing LED bulbs
- Occupancy Sensors
- Weatherizing Doors and Windows
Connect to the Grid – Smart Energy Education

What is Hourly Pricing?
Use less energy during times when prices are high in order to save money on your electricity bill.

Peak Time Programs
Pays for using less electricity at high demand times.
Connect to the Grid with Solar

- Solar Houses of Worship
- On Site Solar
- Community Solar
Connect to the Grid Savings

- Old electric bill
- New electric bill
- Solar bill

Today | 10 years | 20 years

Savings
Connect to the Climate Benefits

![Graph showing Carbon Dioxide Emissions by Energy Source](graph.png)
Connect to the Grid - On Site Solar

- Cuts Carbon Footprint
- Community Witness
- Cuts Utility Bills – Eliminates Supply Charge for kWs generated
- Almost Eliminates Delivery Charge
- Addresses Environmental Injustices – a moral opportunity enacted
Case Example- First Mennonite Church
Connect to the Financing Solar

Residential and Business with IRS taxes

- Cost of Installation = $100,000
- Tax Incentive - 30,000
- Solar Energy Credits - 20,000
- Depreciation Tax Credit- 25,000
- **Total Net Cost** $25,000
Connect to the Financing Solar

Non Profits & Houses of Worship w/o IRS taxes

- Cost of Installation = $100,000
- Tax Incentive - 30,000
- Solar Energy Credits - 20,000
- Depreciation Tax Credit - 25,000

**Total Net Cost** $80,000
Connect to Financing Options

- Cash
- Borrow
- Lease
- Power Purchase Agreement
Financing for PPA Solar

Non Profits & Houses of Worship w/o IRS taxes
With a Power Purchase Agreement
(All Values Guess-timates based on $100k project!)

- Cost for NP at Installation = $25,000
- Cost of Electricity (6 years) = $24,000
- Savings of Electricity (6 years) = -$24,000
- Cost of Buy Out (at 6 years) = $25,000
- Total for Non Profit = $50,000
Leasing Options

Non Profits & Houses of Worship w/o IRS taxes
With a Lease
(All Values Guess-timates based on $100k project!)

- Cost at Installation $0
- Lease @ $1000/month $72,000 6 years
- Savings of Electricity (6 years) -$24,000
- Total for Non Profit $48,000
Borrowing Non Profit Green Lending Program

Nonprofit Green Lending Program

Michael W. Frerichs
Illinois State Treasurer

Everence
Connecting to the Grid: Community Solar

*Visual courtesy of Trajectory Solar [https://trajectorysolar.com](https://trajectorysolar.com)*
Connect to Community Solar – made possible by Future Energy Jobs Act

- Cuts Carbon Footprint
- Community Witness
- Cuts Utility Bills by cutting Supply Charge
- Does NOT touch Delivery Charge
- Solar for All: Addresses Environmental Injustices – a moral opportunity enacted
Connect to Community Solar +/-

- Works if Rooftop is shady or unsuitable
- Few, if any, Up Front Expense
- Lower’s Supply Cost – but not as much as DG
- May be in short supply
- Need developer input from an early point
Connect to Community Solar

• What you need if not Solar for All Project –
  • Three or more subscribers
  • Land (20 acres for 2 MW)
  • Access to the Grid (Substation)
  • A Qualified Developer
Get Connected

• [www.faithinplace.org/faith-partners](http://www.faithinplace.org/faith-partners)

• Search by “Solar Panels”

• 20+ Faith Partners have gone solar already!
Help us connect you with the right information!

Your Interests:

- Start a Green Team / Learn More
  - Energy & Climate Change
    - How to save money with peak time rebates
    - Reducing energy usage and cost with hourly pricing
    - Free Energy Assessment & Energy Saving Products for your House of Worship
  - Sustainable Food & Land Use
    - Nature Outings
    - Community Gardens
    - Winter Farmers Markets
  - Water Preservation
    - Rain Barrels
    - Rain Gardens
    - Interfaith Water Curriculum
  - Advocacy
    - Faithful Citizen Workshops
    - Annual Advocacy Day to Illinois State Capitol

Faith in Place does not share our list with anyone. Information gathered is used for program emails and as a consent to photos taken at this event.
Takeaways and Next Steps

• Start with education and forming a Green Team with Faith in Place
• Get in Where You Fit In; The Messenger Matters
• Celebrate small steps and build momentum
• First Conserve, Conserve, Conserve
• Work with multiple Solar Contractors – ask questions about all options (leasing, PPA, cash, borrowing, community solar)
• Ask Solar Contractors about who they hire – do they hire returning citizens? If not, why not? Favor companies who enact social justice
• Join the Movement - put Your Faith in Place!
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