Connect to the Grid: Solar at Your House of Worship

faith in place

Rev. Brian Sauder, Executive Director

January 16, 2018

Join the conversation

@faithinplace

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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.

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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

OUR FAITH PARTNERS ACROSS THE STATE

Staff Located In:

- Chicago
- Lake County
- North & West Su
- Central IL
- Southern IL

- 16 Full Time Staff
- 56% of overall staff ALAANA
- 50% of Staff Directors are ALAANA

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 Summit
Green Team Coaching
Volunteer
Donate
Wish List
Founders & Fellowship Circles

Donate

Sign Up

Email

Green Team Summit

Join Us!

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

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2019 Green Team Coaching

First Presbyterian Church, Champaign

Nuestra Señora de Guadalupe Episcopal Church, Waukegan

Covenant United Church of Christ, South Holland

St. Mark's Episcopal Church, Glen Ellyn

- 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 disproportionally 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]

[1] https://www.facingsouth.org/2012/11/the-unequal-burden-of-coal-plant-pollution.html
[2] https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlID=15

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

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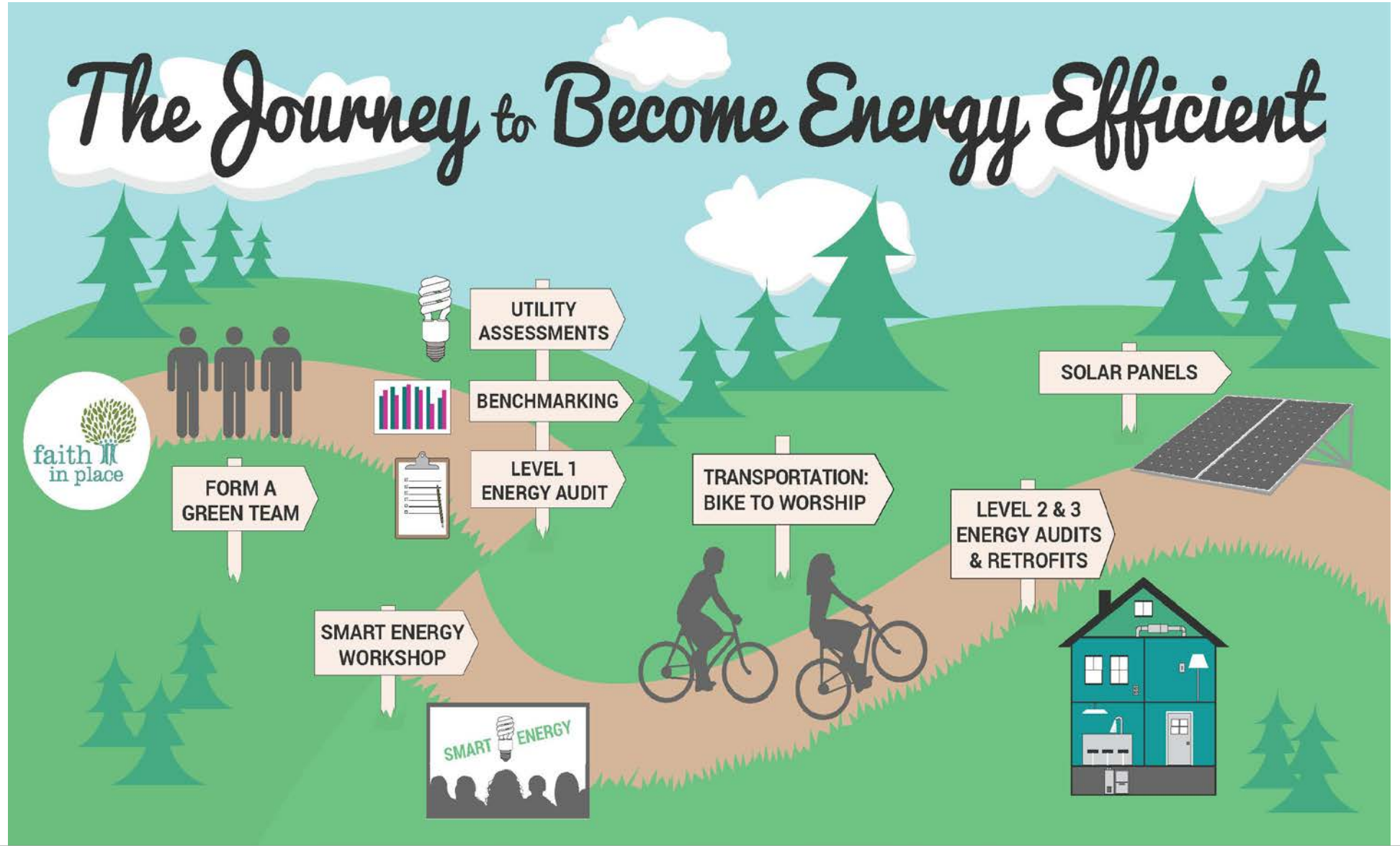


Connect to an Energy Audit

- 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

Peak Time Programs

Pays for using less electricity at high demand times.

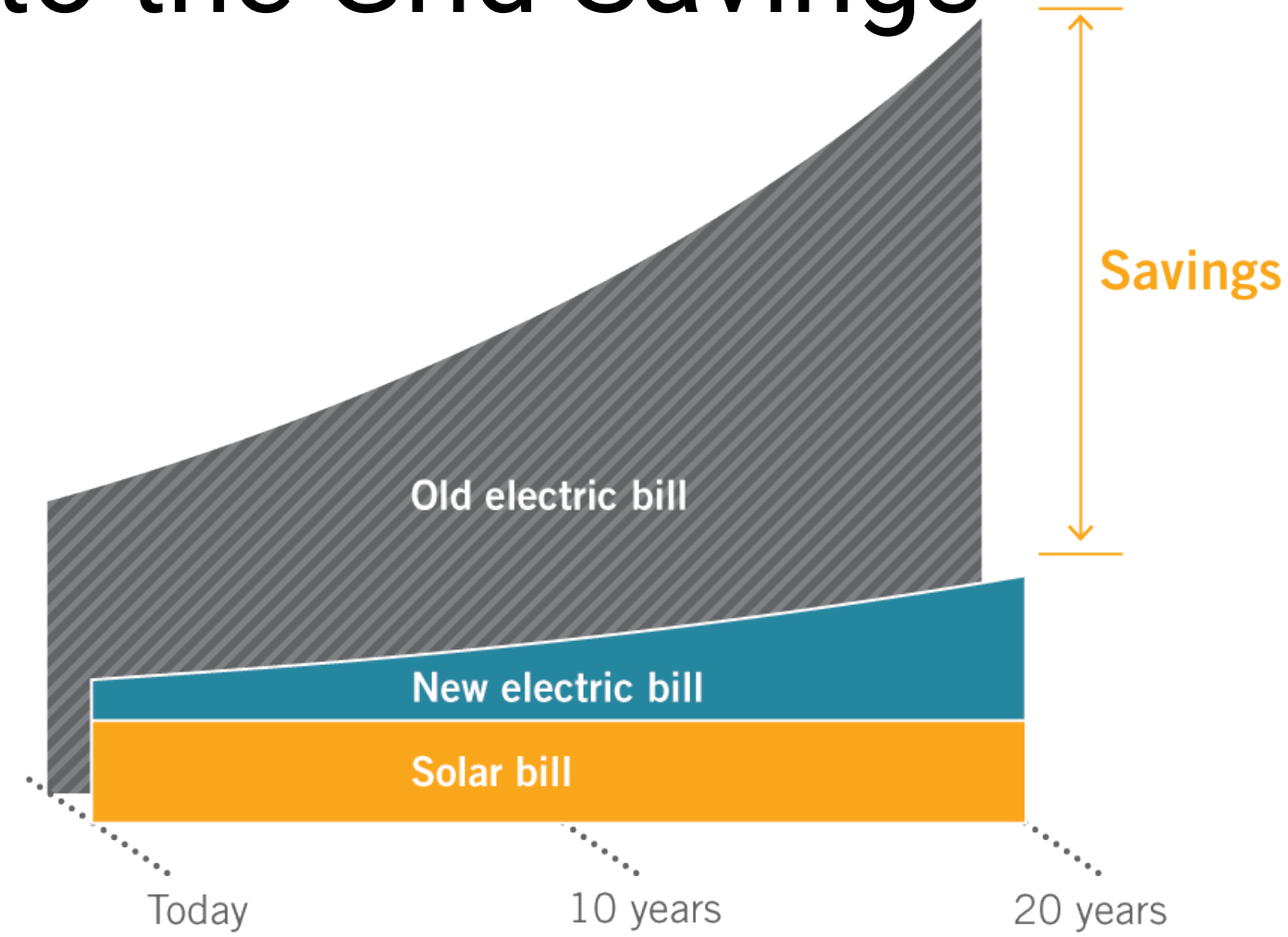
What is Hourly Pricing?

Use less energy during times when prices are high in order to save money on your electricity bill.

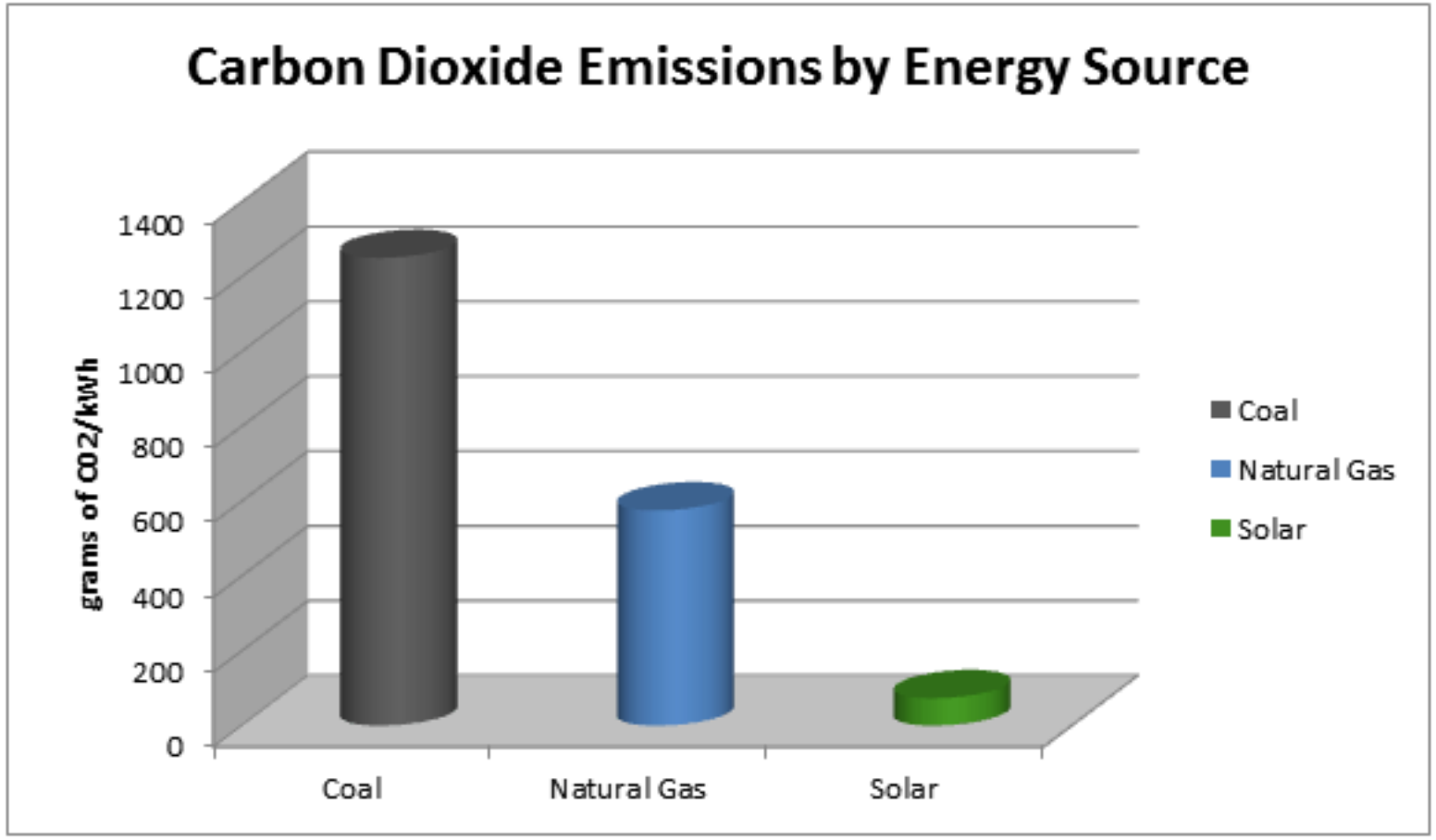
Connect to the Grid with Solar

- Solar Houses of Worship
  - On Site Solar
  - Community Solar

Connect to the Grid Savings



Connect to the Climate Benefits



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***

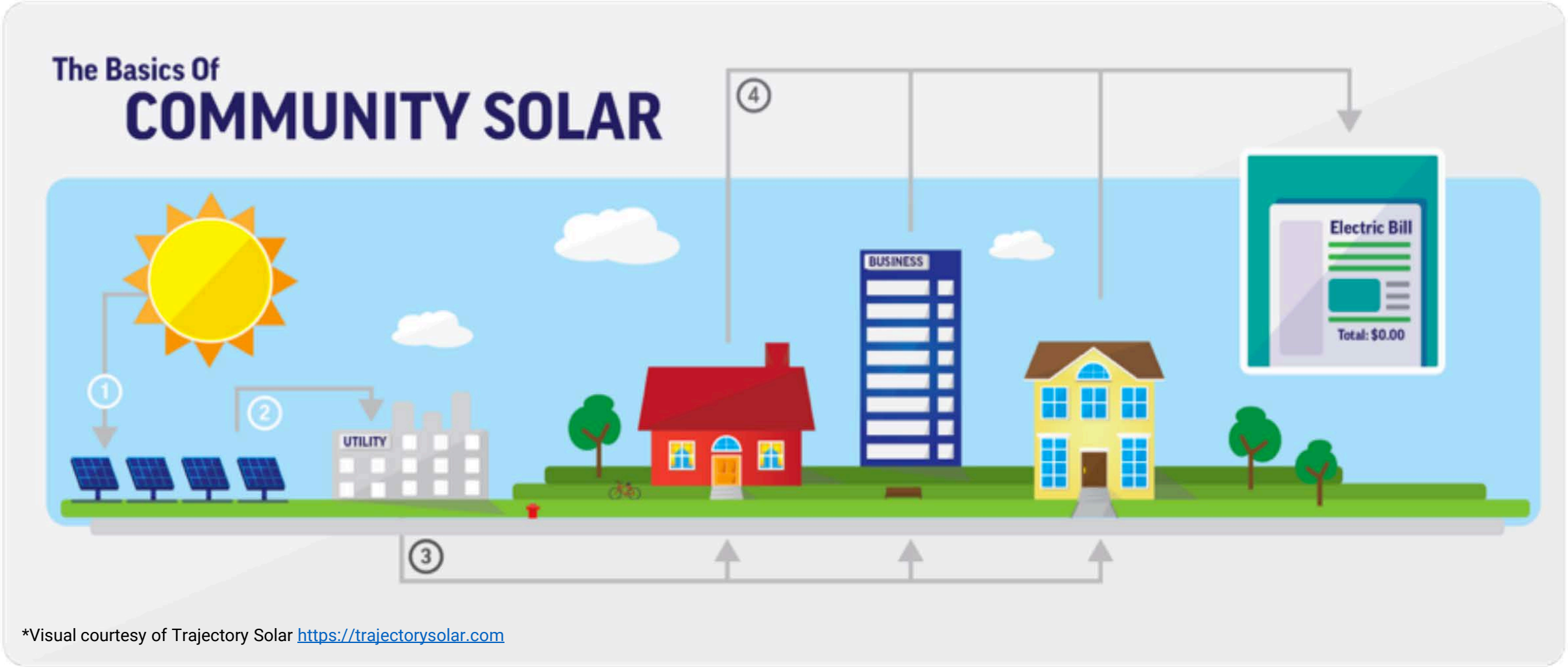
Borrowing

Non Profit Green Lending Program

Michael W. Frerichs
Illinois State Treasurer

Everence®

Connecting to the Grid: Community Solar



*Visual courtesy of Trajectory Solar https://trajectorysolar.com

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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 +/-

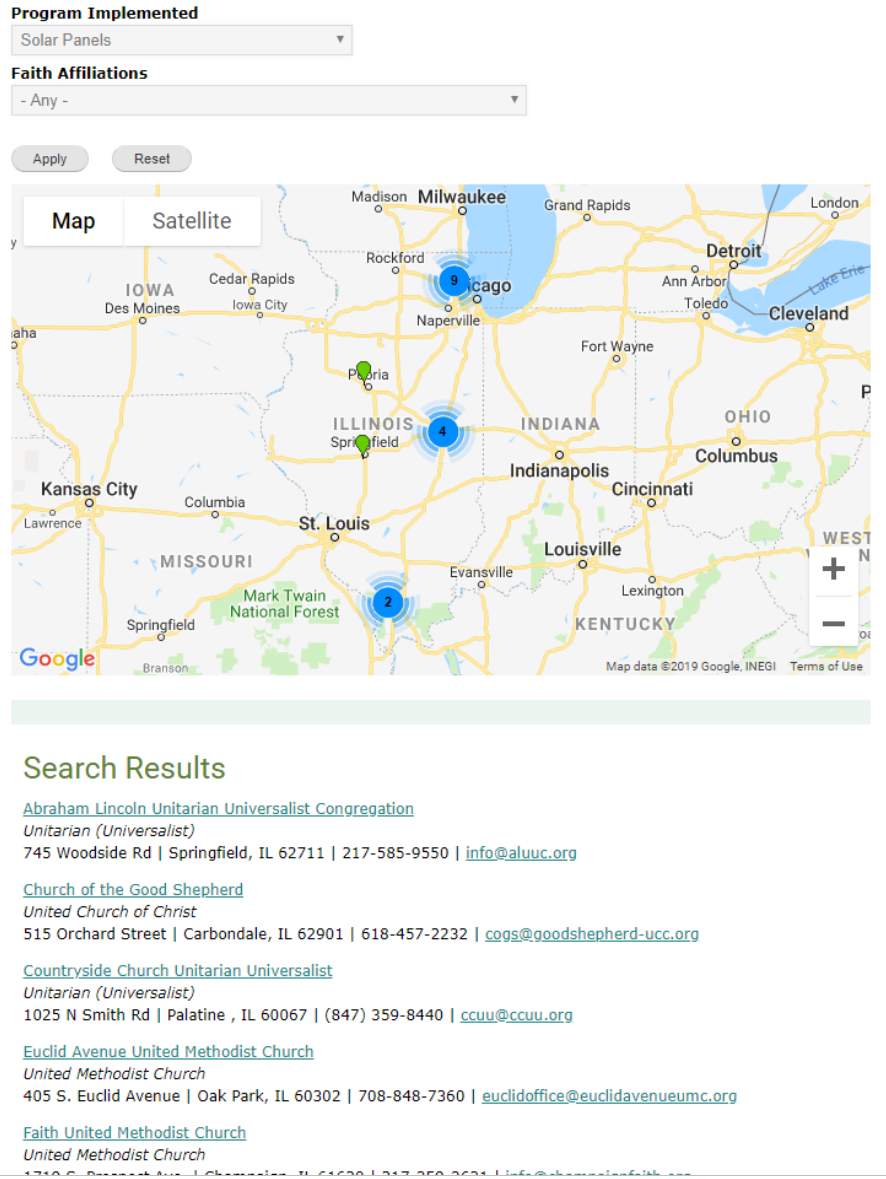
- Works if Rooftop is shady or unsuitable
- Few, if any, Up Front Expense
- Lower's Supply Cost – but not as much as DG
- May be in short supply
- Need developer input from an early point

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
- 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

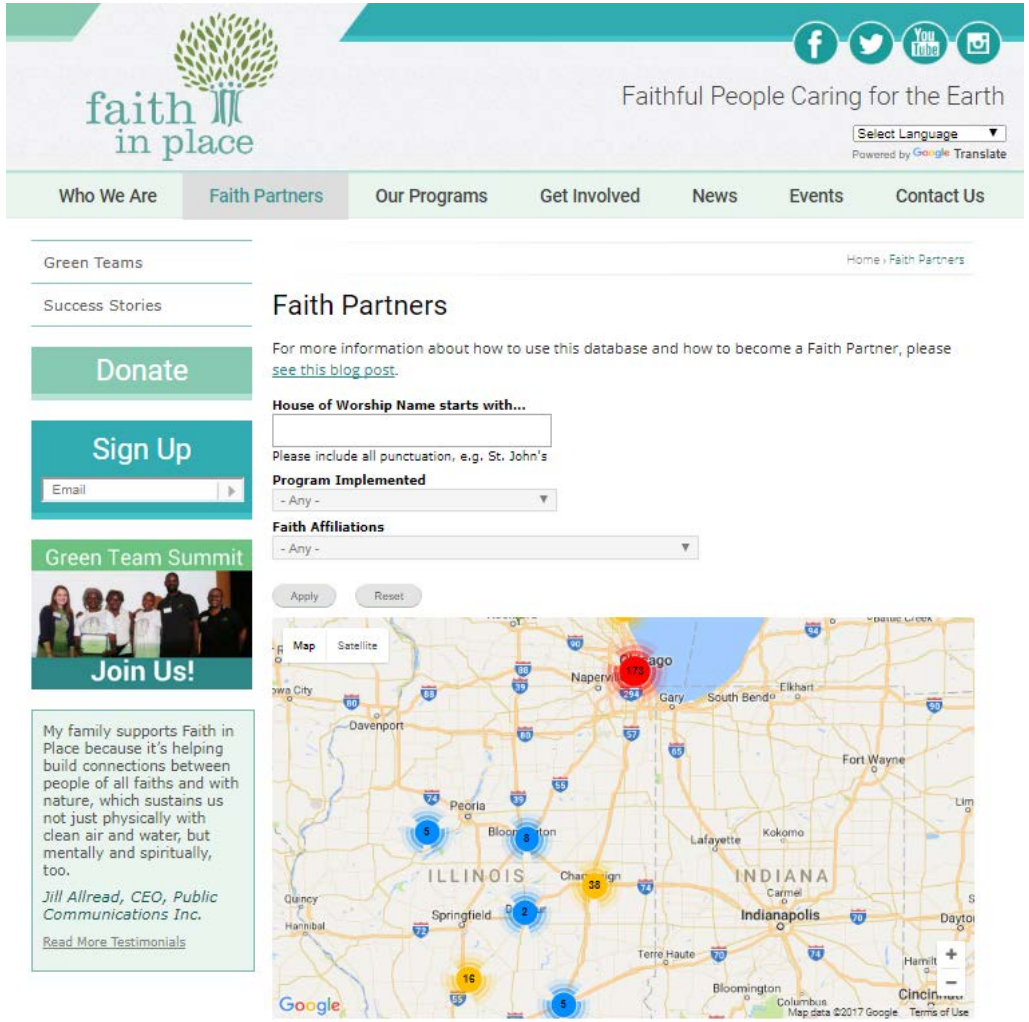
❑ Rain Barrels ❑ Rain Gardens ❑ Interfaith Water Curriculum

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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