

Hoosier Interfaith Power and Light Panel

Pastors, Pennies, and Panels, December 7th 2019



Panelists

Ray Wilson - Hoosier Interfaith Power & Light, Moderator

Rev. Robert Heimach - Irving Presbyterian Church

Joe Bowling - Englewood CDC

Dr. Saiyid Shah - Islamic Society of Evansville

Mike Wigginton - Shalom Mennonite Church



Hoosier Interfaith
Power & Light

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Hoosier Interfaith Power & Light is Indiana Faith Community's Response to Climate Change

[Learn More](#)

Hoosieripl.org

“Bringing together Hoosiers of all faiths, philosophies and spiritualities, in order to promote renewable energy, energy conservation and efficiency, as a response to climate change.”

History

- 1 | Founded in 2010 by members of various faiths across IN
- 2 | Part of National Interfaith Power & Light
- 3 | H-IPL Affiliates and Congregations Across Indiana -
Evansville, Kokomo, Bloomington, Indianapolis, Fort
Wayne
- 4 | Seven values to guide our work - inclusivity, tenacity,
caring for the earth, integrity, cooperation, urgency,
clarity of focus, credibility



**Hoosier Interfaith
Power & Light**

Accomplishments

1

Played a key role in the transition of the Indianapolis Harding Street Coal Fired Power Plant from Coal to Natural Gas

2

Led fight against passing of SB309 - anti solar bill in the Indiana State Legislature. While the bill passed there is widespread knowledge of its impacts and a coalition working to reinstate good bills

3

As part of our commitment to environmental justice, have partnered in the Beyond Coal Coalition to fight against utility rate increases and protect citizens, including Indiana's lower income communities, from burdensome energy prices

4

Led workshops across the state for faith communities- Using Energy Prudently, Climate Boot Camps, Environmentally Responsible Investing, Food Advocacy and more!

5

Helped upwards of 50 Congregations to get Solar Grants

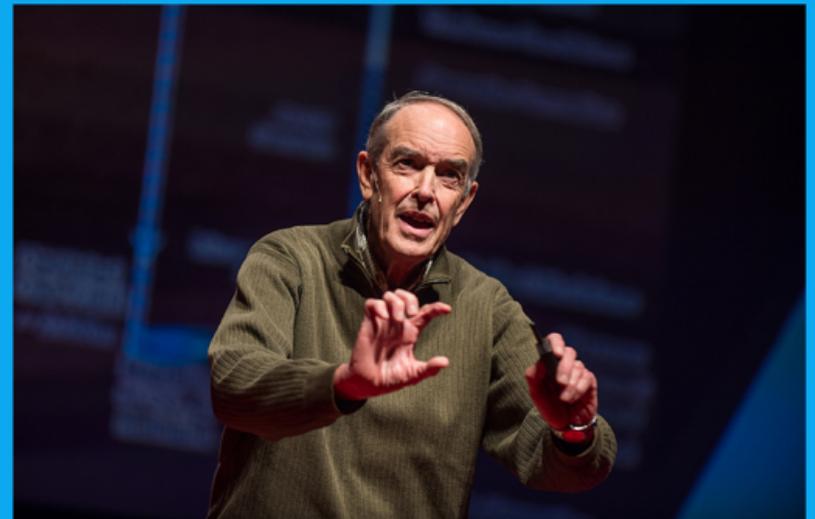


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Ways to Get Involved

Strategic Communicators

- Team of folks who are available on short notice to write LTE's and op-eds about key advocacy issues
 - usually have a professional speciality in addition to a faith/philosophy leaning
 - lawyers, scientists, engineers, clergy, etc.
- Include both your professional perspective and your faith perspective



"Dear IDEM Officer Logan: I am a climate scientist and Emeritus Professor of Physics here at Indiana University in Bloomington. My research focuses on the connection between projected extreme temperatures here in the Midwest and loss of soil moisture. Not surprisingly, as our average temperature increases here in Indiana, soil moisture decreases and extreme temperatures rise. Unfortunately, this rise in temperature is a direct result of our human production of carbon dioxide (CO₂). I wish it were otherwise." ~Prof Ben Brabson, Emeritus Professor of Physics & Climate Scientist



**Hoosier Interfaith
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Ways to Get Involved

Advocacy Network

- Advocacy Network Offers Opportunities for Membership to Get Involved and Take Action on Important Legislation
 - Make phone calls, attend hearings, write letters, public comments, post on social media, etc.

"As a customer, I also believe that IPL has the responsibility to make better choices when it comes to our future energy needs, which will benefit all of us financial, socially, and environmentally. I am here tonight to ask you to reject IPL's request for money to keep burning coal, and instead help IPL become a leader in energy efficiency and clean, renewable energy like wind, solar, geothermal, and battery innovation. It is time for the Petersburg plant to retire." ~Testimony before IURC, Dori Chandler, September 2016



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Metered Electric and Other Services

Service Address: 615 W 43RD ST INDIANAPOLIS IN 46208-3751

Service ID: 83443

Next Reading Date: 12/02/19

Rate: SS - Secondary Service(Small)

Meter Reading Detail

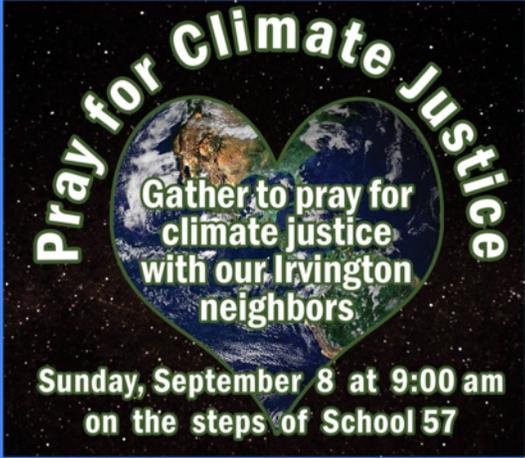
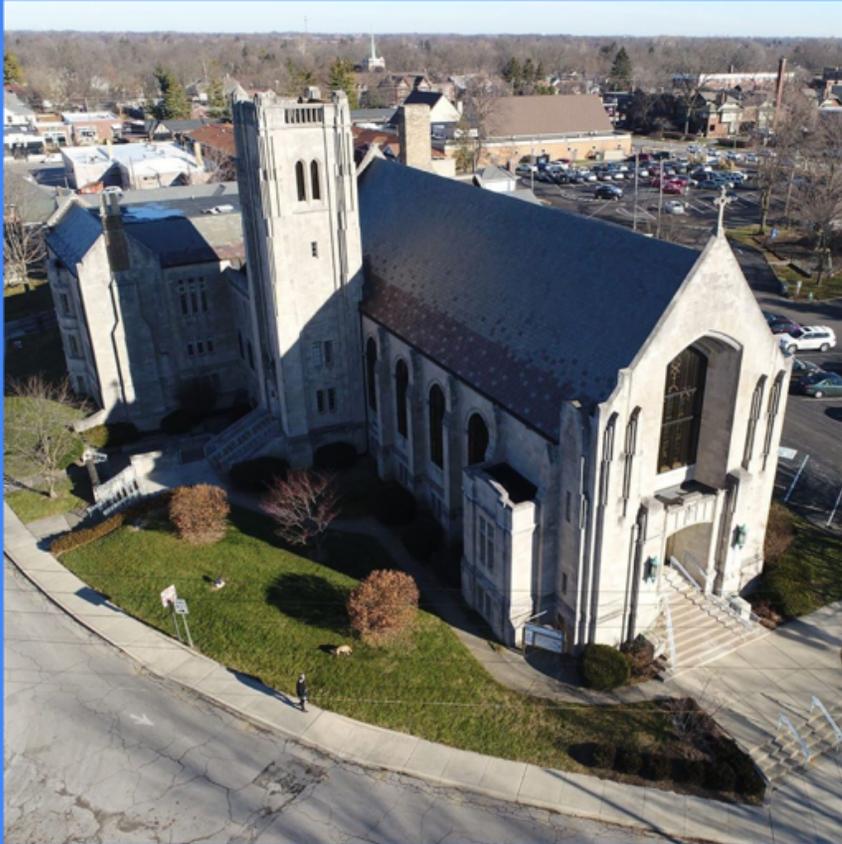
Service Charges Summary

Meter Number	Meter Use	Billing Period		Billing Days	Meter Reading			Multiplier	Usage	Service Charges	
		From	To		Previous	Current	Difference			Customer Charge	Other Charge
0020140	P	10/01/19	10/31/19	30	02066	02087	00021	80	1680	Customer Charge	40.00
0020140	P	10/01/19	10/31/19	30	00559	00592	00033	80	2640	Metered Electric	0.00
									7040	Adjusted Charge	
										Subtotal	40.00

CARRYOVER TO BE APPLIED TO NEXT MONTHS USAGE

||

Irvington Presbyterian Church



Irvington Presbyterian Church

Electrical Expenses – 2016 to Present

Month	Cost 2016	Cost 2017	Cost 2018	Cost 2019
	\$ 1,089.23	\$ 931.11	\$ 788.97	\$ 724.92
1/13-2/11	\$ 1,111.65	\$ 845.46	\$ 687.89	\$ 623.38
2/11-3/14	\$ 787.44	\$ 862.08	\$ 625.17	\$ 630.76
3/14-4/12	\$ 1,010.38	\$ 1,014.38	\$ 962.24	\$ 623.38
4/12-5/11	\$ 1,549.41	\$ 1,662.15	\$ 1,556.70	\$ 976.42
5/11/-6/13	\$ 1,813.10	\$ 1,922.76	\$ 1,793.74	\$ 1,660.44
6/13-7-13	\$ 2,053.52	\$ 2,004.89	\$ 1,650.57	\$ 1,881.32
7/13-8/14	\$ 1,902.96	\$ 1,611.91	\$ 1,173.81	\$ 1,374.20
8/14-9/13	\$ 1,291.73	\$ 1,446.78	\$ 1,027.53	\$ 1,210.01
9/13-10/12	\$ 971.51	\$ 921.58	\$ 685.67	\$ 623.30
10/12-11/10	\$ 1,062.12	\$ 836.49	\$ 820.74	
11/10-12/13	\$ 954.16	\$ 859.51	\$ 818.33	
12/13/16-1/13/17	\$ 15,597.21	\$ 14,919.10	\$ 12,591.36	\$ 10,328.13

Becoming a Resilient Community



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Resiliency at Englewood Christian Church

- Make this a high performance green building



Resiliency in Englewood Neighborhood

- Oxford Place Senior Apartments: *Brownfield to Net-Energy Positive Multifamily*



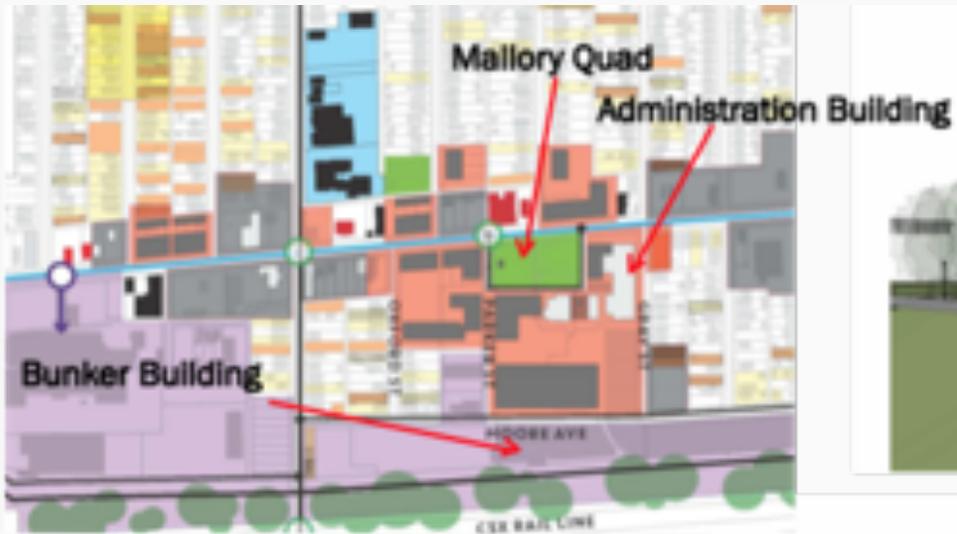
Resiliency in Englewood Neighborhood: OP&A



Resiliency in Englewood Neighborhood: Farm 360



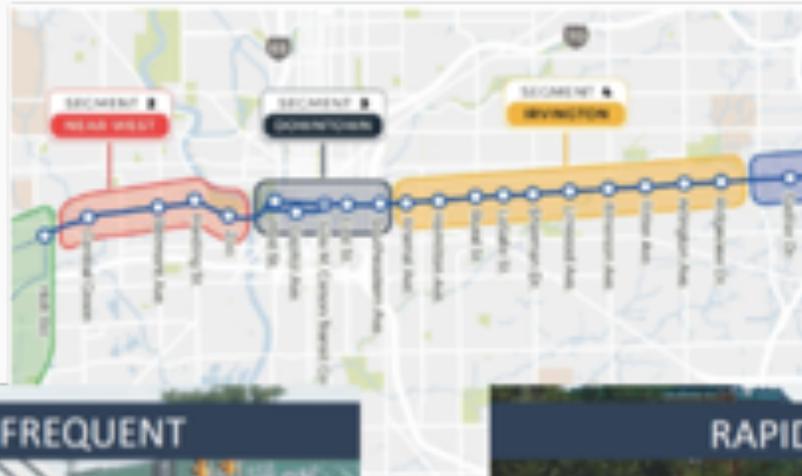
Resiliency in Englewood Neighborhood: P.R. Mallory Redevelopment



Resiliency within the Near Eastside: Jefferson Electric Solar Business



Resiliency with the City of Indianapolis: Bus Rapid Transit/Blue Line



Putting together a solar project

1. Consider getting approval to form a working group
2. Before asking for approval, understand what parameters must be met for an approval
3. Identify internal and external champions and begin meeting and delegating tasks
4. Engage several solar installers! Ask them for site evaluations and solar quotes.
5. Introduce solar professionals to decision makers and key community members
6. Begin thinking about fundraising strategies.
 - a. What's the anticipated funding gap?
 - b. How might we fill it? Organizational savings, debt, charitable contributions, other local grants or incentives.

Selecting a solar installer

- Engage multiple installers – The more you interact the more you learn
- Get multiple quotes – Let the installers know that you're shopping around
- Talk to those who've completed solar projects in your area
- Compare apples to apples
 - Type and quality of panels
 - Type and quality of inverters
 - Warranties on product and workmanship
 - Permits included? Structural assessment?
 - Time needed to complete the project

Solar Project Budget

				<u>Cost</u>	<u>% Total</u>
Solar Installer (20 KW)	20,000	\$	2.44	\$ 48,850	94%
Other Electrical	20,000	\$	0.06	\$ 1,200	2%
New Service Panel				<u>\$ 2,000</u>	<u>4%</u>
				\$ 52,050	100%
				<u>Source</u>	<u>% Total</u>
Indiana OED Grant				\$ 25,000	48%
Utility Rebate Program				\$ 4,000	8%
Individual Donations				\$ 8,500	16%
Church Savings				\$ 1,050	2%
Equity Investment (for 30% Credit)	\$ 15,615	\$	0.86	<u>\$ 13,500</u>	<u>26%</u>
				\$ 52,050	100%

Solar installation





Solar installation



Thanks!



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Dr. Saiyid

INDIANA SOLAR CONGRESS

DECEMBER 7, 2019
INDIANAPOLIS



Outline

- What was your faith call to action?
- Why did your mosque decide to install the solar panels and what was your role in the mosque solar project ?
- As H-IPL Board member how H-IPL's work support your efforts?

PROTECTION AND PRESERVATION OF ENVIRONMENT

- BOTH QURAN AND SAYINGS OF PROPHET MUHAMMAD (PBUH) EMPHASIZE PROTECTING AND VALUING THE ENVIRONMENT AS A CENTRAL COMPONENT OF FAITH.
- QURAN AND SAYINGS OF PROPHET (PBUH) ARE RICH IN PROVERBS AND PRECEPTS THAT SPEAK OF GOD'S DESIGN FOR THE CREATION AND THE RESPONSIBILITY GIVEN TO HUMAN BEINGS TO KEEP THE ENVIRONMENT IN GOOD ORDER.
- THERE ARE MORE THAN 700 VERSES IN QURAN THAT DIRECTLY OR INDIRECTLY SPEAK ABOUT ENVIRONMENT

SOME QURANIC VERSES AND SAYINGS OF PROPHET (PBUH)

- *He it is that made you inheritors in the earth*
 - *Fatir 30 (translation)*
- *But waste not by excess: for God loves not the wasters* - *An'am end of 141 (translation)*
- If a Muslim plants a tree or sow the seeds, and then a bird, or a person or animal eats from it, it is regarded as a charitable gift from him.

MAKING ISLAMIC CENTER AS AN ENVIRONMENTALLY FRIENDLY MOSQUE

Following ISNA Green Initiative Guidelines:

- Planted 45 trees around the parameter of the land as there were no trees on 5 acres land
- Energy saving projects by replacing 300 bulbs with LED lights and smart controls
- Green Ramadan initiation to reduce food waste, minimizing the use of bottled water and Styrofoam
- Installation of Solar panels



Islamic Center of Evansville



Solar Energy – A gift from Merciful God

- *And He subjected for you sun and moon, continuous in orbit, and subjected for you the night and day*

(Translation 14:33).

- **The sun is critical for the life on this planet and is a Mercy from God for us.**
- **Imagine the life on earth without the sun not moving in its prescribed orbit.**
- **The energy that comes from sun is utilized in numerous ways and does not cost a penny as it is the gift of life from God.**



MY ROLE

- Convincing the Executive committee the rationale and cost savings
- Learning basics of solar panel technology
- Identifying the vendors (a challenge)
- Comparison of the pros-cons of available invertors
- Reviewing quotations (comparing apples to oranges)
- Reviewing and comparing warranties
- Helping Executive Committee negotiating the cost and terms of the contract

Installation of Solar Panels at the Islamic Center of Evansville



Roof after Installation of solar panels



Home Made Solar Parking lights for after hours



Specifications of Solar panels

- 144 Solar panels
- 144 Micro-invertors
- 275 W per panel
- 39.6 KW
- Estimated Annual Generation of 51.46 KWh

Note: Approximate saving of \$10,000 in 2018. With this rate of saving the cost will be paid up in 8-10 years against estimated time of 12-15 years (Total cost was \$80,000)

Helpful Hints

- The best places for panel installations are South or Southwest on the roof or ground with no trees blocking the Sun.
- Information on the monthly electric bill for a year
- Calculate the power need using a solar installation calculator at www.solar-estimate.org or similar sites
- Find if any grants are available for solar installation
- Choosing a reliable vendor. Estimate from at least Three

How to Finance ?

- Raise funds from the congregation
- Seek grants
- Members pledge the cost of each panel
- Crowdfunding by forming a for profit company
- Solar lease financing

How Does H-IPL Support My Efforts ?

- Involvement with ISNA “Green Initiative and local Tri-State Creation group brought me to H-IPL for which I am extremely grateful
- Wisdom and dedication of many H-IPL Board members has taught me so much
- Involvement with H-IPL has provided me the guidance, conviction and energy to continue my broad-based involvement in environment and climate change issues which now extends to environmental social justice issues

THANK YOU



Shalom Mennonite Church

Mike Wigginton



Role in the church solar project

- My wife and I installed a solar installation on our house 10/19/2016
- Added an additional panel in 2017
- 16 x Canadian Solar Inc. CS6X-320P (5.12 kWp)
- Solar was pitched at Shalom several years ago but two factors limited us
 - The church building needed a new roof
 - We didn't have buy-in from key church members
- We reinitiated the appeal this year and met with success
- We interviewed two solar installers and had input from Hoosier IPL

Why did our church decide to install solar panels?

- Shalom participated 100% for years in the Green Power option through IPL
- Creation care: the right thing to do
- Financially it makes sense, and more sense than the last attempt
- Enthusiasm of one lady in our congregation
- Presentation to the congregation by Shalom Green Team was convincing
- Extra funds available with church staff changes and under-budget expenditures
- Half of the installation cost came from available funds
- Half of the cost was raised in a matter of days with a Green Team appeal

What was our faith call to action?

- Biblical mandate to care for the earth
- Care for those most affected by climate change
- Mennonite Creation Care Network
- Inspiration of congregations in the Indianapolis Eastside Creation Care network

What part of the process are you in?

- Installation took place 11/22/2019
- Started operating 11/28/2019
- 86 Panasonic 330 watt panels (28.38 kWp)



RENEWABLE ENERGY DAY 2020
JOIN TOGETHER | DEMAND BETTER
TUESDAY, JANUARY 7 | 9AM | INDIANA STATEHOUSE

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