

RENEWABLE ENERGY DEVELOPMENT

Presented by Dave Friedrichs, May 10, 2015

The Green Building committee had its origins as "Green Sanctuary" during our first years at this 45-acre site. The very visible projects from our committee are the wind turbine and tracking solar array out front - and the 48 solar panels on the roof of the Social Hall.

The excitement many of us felt in our move from city to country in 1999 invigorated the **eco-thinking** of those of us who'd been lifelong recyclers, environmentalists and even "sunstructure enthusiasts".

Our church became a <u>UUA Green Sanctuary congregation</u> around 2002; and front and center was the idea that *Every Day Is Earth Day*. Today, as you cross from the parking lot to the main entrance, the tile in the front corner along the walkway has "Every Day Is Earth Day" as its inscription.

There are 257 inscribed tiles in the area along the walkway that we call an *Energy Plaza*. The tiles commemorate family and friends, mentors and leaders - using personal remembrances and inspiring quotes. There are energy formulas, phrases and visions of a sustainable future. Song titles are there, like "Spirit of Life", "Here Comes the Sun and Blowing in the Wind. One tile is repeated six times "Peace Is Every Step".

Each tile was purchased by someone from the congregation who invested in the idea of renewable energy. The TILE program raised more than \$90,000 – and made it possible to complete the three renewable energy projects that have <u>cut our dependence</u> on fossil fuels by more than 15%.

The story has players, prayers and persistence – so, here's a quick summary.

As the new millennium got underway, Green Sanctuary committee members, namely the late Dick Brown, John Wakeman and I, took note of the rise in interest in wind power. We noted that this new site was only 100' lower than the <u>highest</u> point in Washtenaw County – AND had open land that could take advantage of prevailing winds from the NW.

This inspired us <u>to purchase and erect</u> a 100' anemometer tower to measure the power of the wind across the site. After a 9-month test, however, we found our site broke no speed records at 100'. Then, our focus shifted away from renewables and onto building an energy efficient addition – the SGD wing.

After the ribbon cutting for the much more efficient space, additional players (and some prayers) helped turn attention back to renewables. The *Celebrating Our Planet <u>World Café</u>* event stirred the thinking of

a larger group. AND, we found that the intervening 3-years had brought to the market small wind generators with new efficiencies. If we could increase the tower height a bit, the wind power needed might be found!

As any who knew Dick Brown remember, he was both inspiring man and had a <u>can-do scientific mind</u>. It was this inspiration and attitude that caused me and others to persist in pursuit of renewable energy, despite losing Dick to cancer before tile subscriptions even got under way.

The 2008 -2009 period was key for the project - because the tile program went forward AND the State of Michigan passed Public Act 295 which required utilities to have 10% of their power from renewables by 2015. Overnight, an incentive program offered by DTE <u>cut the cost of solar in half</u>. When the Tall Structures office in Lansing lowered our request for a 120' tower - unless we agreed to add a blinking red light to the proposed turbine - we shifted to a smaller, shorter wind turbine and a majority solar project.

Persistence and about 130 contributors raised the needed funds. Thus, as Rev Gail began her service with us, the renewables project was ready for permitting. With her support and the congregation's, the turbine and Social Hall solar were completed at the end of 2010 – with the tracker and Plaza in 2011. Since installation, the three systems have reduced electric bills by close to \$4,000 a year (see <u>www.uuaa/org/e</u> to track, updated every 15-minutes, around the clock).

Looking ahead, MANY more energy <u>savings</u> are needed; <u>and</u> the possibilities for renewables include more than just our ample roof space (for more solar panels). How can we put our energies into action as we start our next 150-years?

Besides your own home and work places, <u>bring your ideas and energy</u> to our Green Building Committee. There's a flyer to pick up on the way out. It's with our projects engineer, congregant Mark Doman, who is seated in the ONE and ONLY seat in the sanctuary with a direct view of the wind turbine.

There's also a national non-profit called <u>*The Solutions Project*</u> with a state-by-state strategy for 100% renewable power by 2050. This may be where we all need to <u>persist</u> AND, for inspiration, **to hold high** that Blue Marble from a couple of weeks ago and say "Together, We Can"!

Happy Mother's Day ... Mother Earth !!!



