

Turning Away from Despair: NASA Scientist Calls Mennonite Churches to Pursue Renewable Energy

By Jennifer Halteman Schrock

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As a NASA scientist whose job includes readying his institution to face a future shaped by climate change, Russell De Young should be at high risk for a case of despair.

Every week at work, the emails roll in describing drought, crop failure, hurricanes, vector-borne diseases and other climate change impacts around the world. As a resident of Newport News, Va., De Young lives in an area second only to New Orleans, La., in its vulnerability to sea level rise. Flooding frequently comes up in local newspapers.

Yet De Young is upbeat, practical and oddly hopeful about the whole matter.

“I believe climate change is the dominant issue facing us in the future, and I also believe we have the capacity to do something about it,” he says. Even more striking, De Young is convinced that the Mennonite Church USA has an important role to play in turning helplessness into constructive action.

“Mennonites have a peace-making theology in place that enables them to be a witness to the greater Church, and if you are going to take peacemaking seriously, you need to make peace with creation,” De Young insists. His vision for making peace with creation focuses on renewable energy. He imagines Mennonite churches scattered all over the country, their roofs covered with solar panels and their parking lots filled with electric cars.

It’s an idea De Young is ready to put money behind. He has issued a challenge to Mennonite churches in the form of grants administered by the Mennonite Creation Care Network. The Pam De Young Net Zero Energy Fund will make up to \$12,000 per year available to assist congregations eager to move beyond fossil fuels. A building or community that is net zero energy produces enough energy for its own needs through wind, solar or other renewable means.

De Young’s decision to offer net zero energy grants braids together several threads in his life: his work at NASA, his long history as a peace advocate and his love for his wife, Pam, who died in 2015. Professionally, De Young is a climate adaptation science investigator for NASA, working out of the Langley Research Center in Hampton Virginia. Using supercomputers that can generate complex models of the climate as far out as 2100, he advises his center on potential climate change impacts.

The best models show that Planet Earth is in for substantial changes. “Climate change is going to affect all of us—especially the poor,” De Young asserts. Because carbon dioxide molecules persist in the atmosphere for about 100 years, there is no way to avoid getting

warmer, but swift action may avert the more drastic scenarios that the models predict. Thankfully, a number of tipping points—events that lead to irreversible change—may still be avoided. The melting of permafrost in northern Canada is one example. If this happened, it would release enormous amounts of methane, a potent greenhouse gas that would heat the planet even further.

NASA has responded to the models its scientists generate with a plan to reach net zero energy between 2030 and 2040. Already, its new buildings are LEED® certified. In De Young's mind, what NASA can do, the Mennonite Church USA can do too. And if Mennonite churches can reach net zero energy, so can the rest of society.

Peacemaking and public witness form a second thread running through De Young's life. He and Pam joined a Mennonite church following the first Gulf War in order to become part of a denomination that could support their opposition to the war. De Young's peacemaking entails forms of public witness that have sometimes gotten him into trouble. He's crossed lines at the Pentagon and at Fort Benning, Columbus, Ga.

De Young's more recent activities still have a radical edge. He is an active member of Huntington Mennonite Church, Newport News, Va.—a theologically diverse congregation that both welcomes its military neighbors and holds a monthly peace witness. De Young and about a dozen others who share concerns about issues such as drone warfare meet on street corners or outside military bases to offer an alternative perspective to whomever will listen. He also teaches computer classes for veterans at the local VA hospital.

When De Young talks about solar panels, he speaks of witness as well. Do the neighbors know they are welcome at the electric car charging station his congregation is installing? What can help a roof full of solar panels call the whole community to peace with creation? These things matter to him.

On a more personal level, the Pam De Young Net Zero Energy Fund is a memorial to someone deeply loved. "Pam was a wonderful example of what creation care looked like on a daily basis," De Young says. She conserved resources in many small ways and took delight in nature—walking in a nearby forest preserve, feeding the birds and caring for other backyard animal life. In human settings, she spent the last 12 years of her life training care givers of Alzheimer's patients. Her patience and knowledge of Alzheimer's disease helped many people.

Part of a larger vision

Congregations can apply to the Pam De Young Net Zero Energy Fund for up to \$10,000 toward solar panels. About \$1800 is earmarked for electric car charging stations. Churches with other creative ideas related to renewable energy may apply as well. A subcommittee of Mennonite Creation Care Network's (MCCN) Creation Care Council will administer the fund and select recipients.

Applicants are asked to show that their request for solar panels is part of a larger movement toward net zero energy. De Young's home congregation, Huntington Mennonite

Church in Newport News, Va., is an example of the kind of thinking the application process is intended to inspire. Last fall, Huntington put in place a plan that they hope will get them to net zero energy within ten years. One of the first steps was to replace the heating and air conditioning system with an electric heat pump that cut energy consumption by about 30%.

Next, they installed four charging stations for electric cars in the front parking lot where they would be visible to the community. Guests are welcome to charge their cars during daylight hours. “We are able to offer this free service without breaking the bank, since a charge only costs about a dollar,” Pastor David Mishler reports. Another step involved purchasing a year’s worth of solar and wind energy credits from their local power company. The church is now beginning to work up cost estimates on solar panels.

MCCN also asks applicants to work through its Greener Congregation Stewardship Scoresheet. The worksheet pushes groups to consider the ways creation care plays out in their overall vision, worship, ecological setting, commitment to justice and daily living. Ideally, this process will involve a broad range of people, not just the congregation’s building geeks.

“A church is not just any nonprofit making a business decision. Our practice should be informed by our faith commitments. This is the foundation for our choices and the kind of thinking that enables us to make green energy a point of holistic witness in our communities,” explains Luke Gascho, Goshen, Ind., who helped found MCCN and drafted the score sheet some years ago.

Is renewable energy affordable?

Favorable economics are making net zero energy plans more than just pipe dreams. Mark Horst, a part-time pastor at the Yoder campus of Journey Mennonite Church, South Hutchinson, Kans., and owner of King Solar, a solar installation company, says that the cost of solar panels has dropped more than 50% in the last five years. When Horst started in the business in 2011, the price for a residential system was about \$7 per watt and a typical 5000-watt system would have cost \$35,000. Today, the price for the same system would be \$15-16,000.

Payback depends on the local utility’s price per kilowatt-hour and the policies regarding connecting to the grid. It is a bit longer for churches than for homeowners and businesses because churches are tax exempt and cannot take advantage of the 30% Solar Investment Tax Credit. Horst says there is a legal work-around: a business can buy the solar panels, own them for at least a year, take the tax credit and then donate them to a church.

A number of Mennonite churches already use solar panels. Benton Mennonite Church in Benton, Ind., Kern Road Mennonite Church in South Bend, Ind., Park View Mennonite Church in Harrisonburg, Va., and First Mennonite Church of Champaign-Urbana, Ill., are a few examples. Blessed with a south-facing roof, Benton Mennonite Church installed a 10-kilowatt system in 2013. The 42 panels produce 75% of the electricity they consume.

Thanks to the expertise of a member, the congregation's timing couldn't have been better. They were able to take advantage of a favorable deal their local power company offered at the time which should enable them to reach payback in seven years.

Pastor Brenda Meyer says the decision was not controversial. "Those who weren't convinced by the creation care angle were convinced by the numbers," she says. Having members with the skills needed to install the system also helped. She encourages congregations considering solar to research a variety of options for purchasing the panels, for attaching them to the roof and for labor.

Kern Road Mennonite Church invited the public to a solar open house May 21. The event celebrated the beefy array of solar panels the congregation installed last fall and included workshops for homeowners interested in solar power. Kern Road purchased its panels with assistance from Hoosier Interfaith Power and Light (HIPL), Indiana's branch of the national nonprofit whose tag line is "a religious response to global warming."

Climate change is a different kind of issue for the Mennonite Church. It is less visible than the loss of young people; slower than sexual abuse; less explosive than arguments over same sex marriage, but in some ways, grimmer than all of these. Amidst the causes for despair, a persistent, prophetic voice from a Southern Baptist transplant demands a hearing. De Young insists that the Jesus way is still there underneath the rubble and still relevant. He points a way forward, determined to trigger a rush on renewable energy and a cascade of hope.

To request application materials for a grant from the Pam De Young Net Zero Energy Fund, email mccn@goshen.edu or call Jennifer at 260-799-5869. Apply between August 1 and October 31.

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