universe, God's creation is good, and that human beings are created in the image of God. Throughout their years here, our students engage in *tikkun olam*, and embrace their role as agents of change. When they are

ready to leave our school, they understand that their individual actions can make a significant difference not only in the world we live in today, but also the world we are leaving to future generations.

Sh'ma

Sustainable Design

Les Klein

"It's not easy being green."

—Kermit the Frog, 1970

"We are not trying to make good buildings. We are trying to make buildings that are less bad."

-Professor Imre Halasz, 1974

For two phrases to guide architects in creating buildings that are based upon the values inherent in sustainable design, the above would be hard to beat. Both sentiments suggest that human activity has inherent impacts on the environment and that despite our enormous accumulated knowledge, we still cannot be fully sure whether those impacts are or will ultimately be positive or negative.

Sustainable design principles embrace far more broad-reaching issues than merely reduction in energy usage. Increasing the amount of insulation in walls to reduce heat loss or heat gain or utilizing renewable energy sources such as solar panels or wind turbines helps to reduce the amount of nonrenewable resources needed to provide for human comfort. Locating the building near public transit and placing the windows to take advantage of the orientation of the sun can also achieve reductions in energy usage and improve human comfort without additional capital cost.

Sustainable design requires a holistic approach to envisioning, designing, building, and operating environments. But, lest our idealism carry us away, we must keep in mind that designers need to be both environmentally and fiscally responsible; a building project does not achieve any of its goals if it ends up not getting built.

My experiences as the architect of the new home for Congregation Darchei Noam, in Toronto, highlighted many of the issues associated with designing an environmentally responsible synagogue in the "real world." Darchei Noam is committed to the principles of Reconstructionist Judaism, and the congregation ranks *tikkun olam* high among its goals. Thus, when embarking upon the project, the principle of "green design" was among

the stated objectives of the project. Yet funds were limited, so each and every option had to be examined for its environmental contributions as well as its impact on the budget.

There are several industrywide systems of measurement to determine whether a project is "green" and the extent to which it measures up to sustainable design standards, including LEED (Leadership in Energy and Environmental Design) and Green Globes. These systems utilize basic categories of components to rate the extent to which a building achieves reductions in its carbon footprint. For example, the basic LEED categories are Site Selection, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Air Quality, and Innovation and Design Process.

In the course of designing Darchei Noam, we struggled with numerous "green" options as we balanced the principles of environmental design, fiscal responsibility, and community values. While solar panels were initially proposed for the new flat roof, their capital cost — given that they would generate only a small fraction of the total energy needed — could not justify the expense. However, the Province of Ontario's new program of purchasing energy generated from renewable resources provided a way to utilize the power created by the solar array, subsidize part of the cost of the installation, and provide a highly visible symbol to the community of the congregation's commitment to "green" principles. In addition, a single solar panel was connected to a battery pack that captures, stores, and provides the energy to run the ner tamid in the main sanctuary, providing the congregation with a visible connection to its values.

One of the principles of sustainable design urges the uses of locally available materials to reduce the energy involved in transporting materials to the site. In examining options for cladding the front of the structure, stone from local quarries was compared with the preference of the congregation, Jerusalem stone. The use of Jerusalem stone was such a strong symbol of the congregation's connection to *Eretz Yisrael*

Les Klein is a founding principal of Quadrangle Architects Limited, in Toronto, quadrangle.ca.

June 2008 Sivan 5768 To subscribe: 877-568-SHMA www.shma.com



that the "green" imperative was set aside. The compromise was made to use stone that was half as thick as a full stone face in order to reduce the amount of stone that had to be transported across the ocean.

These decisions exemplify the process that communities and individuals undertake in balancing the human desire to build while ensuring that the building contributes positively to the future of the earth's environment.

Sharing the Earth

Andrea Cohen-Kiener: Does your mandate for climate change come from Genesis?

Rusty Pritchard: Yes, but as an Evangelical Christian, I often go to John 3:16, which starts off, "for God so loved the world." Most Evangelicals hear that word "world" and think it means all the people in the world. But the word is *cosmos*. And it fits with the story of creation in Genesis that God loves his whole creation.

Cohen-Kiener: We need to acknowledge our grandeur and our smallness simultaneously. I've experienced a resistance in the Jewish community to environmental efforts; I've heard often over the past ten years, "we have more important issues to address." Have you experienced similar speed bumps?

Pritchard: The biggest speed bump is a limited conception of God, and a comfortable conservatism that is scared of change. But I ask people, "what is it that we are conserving?" Of course we need to conserve natural resources, God's creation, and families and the ability of families to make a living, and to conserve beautiful places including small towns and farms and places where people live on the land, and communities, and what makes human civilization good and beautiful and diverse. Respecting diversity because it's a blessing from God, we can acknowledge that good things are connected to the created order and have emerged from the created order. That takes us past the shallow conservatism of fearing new ideas and deeper to a conservatism that says there is a good world including what we call a natural world and what derives from it. We ought to do our best to take care of it.

Cohen-Kiener: In my community, there are primarily two speed bumps. First, my people are a minority and there's a natural tendency toward particularism — taking care first of oneself, one's people, one's family. The universalism of environmentalism makes some Jews feel it's not an essentially Jewish issue.

Pritchard: Even though it's not demographically true, Evangelicals also feel like an embattled minority culture. We're a faithful remnant that acknowledges the truth even though the

world has gone another direction. Because God means us to live and appreciate a good earth, many conservative Christians are concerned about creation care. Destroying creation and bringing ecological degradation are like ripping pages out of scripture.

Cohen-Kiener: Let's talk about the pervasive value of consumerism in our culture, our deep hungers of the spirit and flesh. Our culture is so illiterate about the hungers of the spirit that we try to fill up that hunger with a new car or fancy vacation. And we're polluting the planet in that effort. We need a counterbalance to consumerism.

Pritchard: We have such a fundamental addiction to consuming. The Jewish Sabbath is an antidote to that hunger. It helps us test what we can give up from material culture. The concept jumps out of every New Testament book — the rhythms of rest and satisfaction and enjoyment of the created order are meant to pervade all of our lives. There are weekly rhythms and cycles of seven years and the jubilee cycle of 49 years of celebrating the sufficiency and the providence of God, where we rest and enjoy and encounter with delight the works of God. The Ten Commandments command not only your rest, but also that of all your household, including everyone who works for you and all of your animals. And the land. They demand we not push to the limits our ecological systems or the people who work for us.

I've just returned from a pastors' conference in New York City where some of the urban churches are trying to reclaim the idea of cities as good places. Evangelicals generally hold an anti-urban bias that comes from a vision of our faith as a remnant existing outside of the mainstream of culture. There's an inability to see cities as places that need investment and work, as places to build community. In a highly urbanized culture we have to rethink our environmental work — conserving not only wilderness or endangered species but also building sustainable communities. I wonder whether there's something to learn there from Jewish tradition, which thrives in cities.

Please visit shma.com to continue this interview.

Rabbi Andrea Cohen-**Kiener**, director of Connecticut's Interreligious Eco-Justice Network, is the spiritual leader of Congregation Pnai Or of Central Conn. She is author of Life on Earth: A User's Guide, and For All Who Call: A Guide to **Enhancing Prayer In**struction in the Jewish Community. She is also the translator of Conscious Community, A Guide to Spiritual Development, written in the early years of World War II by Rabbi Kalanymous Kalman Shapira. **Dr.** Lowell "Rusty" **Pritchard**, a resource economist, is the national director of outreach for the Evangelical Environmental Network and the editor of Creation Care magazine, a Christian environmental quarterly.

June 2008 Sivan 5768 To subscribe: 877-568-SHMA www.shma.com