

Catholic and Sustainable: A Green Approach to Church Architecture

by **Carol Frenning**

Architects today are buzzing about green buildings, solar alternatives, and LEED (Leadership in Energy and Environmental Design) certification. What is this all about and how does it relate to Catholic liturgical architecture? "Green" is a sustainable way of building that respects the environment. How can a building project meet this goal? It requires research to find solutions for environmental issues. For faith communities, it also involves an intrinsic commitment to fostering respect and justice for the whole earth.

Catholic Concern for the Environment

Many environmentalists document the beginnings of the modern environmental movement with the publication of Rachel Carson's book *Silent Spring* in 1962. The author associated deformed animals and plants with artificial pollutants in the environment. Roman Catholics, however, have had an awareness of environmental destruction caused by human action for far longer. Beginning with *Rerum novarum* in 1891, official Catholic documents have called attention to our responsibility to care for the earth, share all that it produces, and provide for just distribution. *Rerum novarum* states that responsible sharing is a requirement for peace and justice. Pope John XXIII's encyclical *Pacem in terris*, promulgated in 1963, echoes this value and tells us that justice is clearly and inextricably linked to our relationship with the earth and all that it produces.

These teachings culminated in *The Ecological Crisis: A Common Responsibility*, the message delivered by Pope John Paul II at the World Day of Peace in 1990. This was the first papal address entirely devoted to environmental concerns. Here, John Paul raised specific environmental issues such as acid rain, the greenhouse effect, and deforestation. He warned that consumerism and instant self-gratification were the root causes for what he called an ecological crisis. They prompt actions that fail to respect the earth and the proper distribution of its fruits. He used the opportunity of World Peace Day to call for concrete initiatives to combat what he called a moral

issue because our personal values and choices affect the well being of future generations (#14).

In 1991, the U.S. bishops identified seven Catholic moral and spiritual traditions as “integral dimensions of ecological responsibility” in *Renewing the Earth: An Invitation to Reflection and Action on Environment in Light of Catholic Social Teaching*. The first of these traditions speaks of a God-centered, sacramental view of the universe. From our scriptural beginnings in Genesis, when God created the world and pronounced it “good,” we find belief in an immanent God and an incarnational theology in which God took on human flesh to become one of us. Based on this understanding, we believe God to be present throughout the created world.

Giving thoughtful consideration to our scriptural foundations and Roman Catholic tradition helps us to understand the importance of respecting God’s creation, as well as the moral imperative for right relationships and reverence for the whole earth. This provides a larger context for seeking ways to incorporate sustainable design into building and renovating churches. Does this mean we have to abandon traditional forms and detailing in favor of a rustic or a high-tech look? No. Sustainable architecture is not a question of style; it is about choices made during the design process.

Sustainable design views the building holistically and observes how it interacts with the environment. This awareness informs decisions about efficient energy, whether to build on a watershed area, or choosing not to disturb a natural prairie environment. Additional deliberation can include conserving water, incorporating geothermal heating or gray waste water that reuses water through re-filtering systems, or how to select materials outside and inside the building. The planning process for sustainable design can take longer because of the research needed and because we may need to change our thinking process in order to see the bigger picture.

Building “Green”

- Invite the building committee to study Catholic documents on justice and environmental issues.
- Study the natural setting of your site, the view and also natural heating and cooling options: sun in the winter and cool breezes in the summer.

- Ask LEED to inspect and certify your project. Consider dedicating space to serve meals to the poor or elderly or to house families in need.
- Provide views of the natural world by incorporating outdoor areas for prayer.
- Encourage “reversible renovation.” Reversible renovations allow for building changes to be reversed if necessary in the future. Sloping a flat floor may be helpful now, but it may prove to be more costly when adding a later addition to the building.
- Select structural and mechanical systems and materials that are ecologically and environmentally friendly. Cork and linoleum are natural materials, not synthetic ones. High-energy efficient HVAC systems also support a sustainable environment.
- Educate the whole congregation about the values, spirituality, and theology that support sustainable decisions.

A Witness for Others

The Sisters, Servants of the Immaculate Heart of Mary (IHM), in Monroe, Michigan, chose to “think green” when they renovated their 376,000-square-foot motherhouse. Rather than building a new, smaller facility, they chose to reduce the impact on the environment by building one of the largest privately funded geothermal fields in the country, with a high-energy efficient mechanical system and a restored oak savanna ecosystem. Their efforts produced an award-winning model for sustainable living and building that inspired the state of Michigan to form a Green Building Council. The Sisters also formed the River Raisin Institute to promote education for care of the earth. The Sisters’ recent plan for the renovation of their Motherhouse Chapel will also value sustainability.

The proposed renovation honors this commitment, as well as the needs of their changing congregation. In addition to respecting the existing architecture with a reversible renovation plan, many existing materials will be repositioned and reused. Any new materials will be chosen with sustainable qualities. In this renovation, sustainability brought about a congruence of faith and practice that will have a lasting impact far beyond the current generation of their community.

Being Catholic and being “green” is more than an architectural rage. Sustainable architecture supports a Catholic spirituality that respects the sacredness of all creation and a tradition of justice that calls everyone to right relationship with one another and the world around us.

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