Principles Around Environmentally-Friendly Building Projects

www.ecochurch.arocha.org.uk
It was a simple word that gave Hawkshead Hill a vision for their chapel. It was the term ‘oasis’. Since that moment back in 2004, they’ve worked hard to make the chapel and grounds in Ambleside, Cumbria, not only welcoming to visitors – but also kind to the planet.

‘No hospitality would be complete without shelter and refreshment, and so the chapel is open at all times, and self-service drinks are available,’ said one of the ministers, Rev Kath Dodd. Shelter is also to be found in the grounds, in the shape of a summerhouse and a poustinia (simple prayer place).

‘We’ve examined every aspect of our life together,’ Kath explained. These are just some of the areas where they’ve sought to be kind to creation:

– developed their grounds sensitively;
– recycled where they can;
– seating includes oak blocks and slate seats;
– the baptistry used to be a drainage ditch;
– the communion table is a former pew;
– the chapel building itself is a ‘born-again’ barn.

‘Our prayer is that those who visit will find the place an oasis,’ said Kath.
Creed, creation and construction can be interwoven into the fabric of church buildings

That’s the firm belief of ‘green architect’ Anne Dixon. ‘The Scriptures have so much to tell us about our stewardship of creation,’ she said, ‘that it’s difficult to be a person of faith and not to be green.’

A partner with London-based Green Tea Architects, she has designed a wide variety of projects – from a householder’s private prayer loft to an award-winning eco-school.

‘If I want to be true to my faith and work in architecture,’ she said, ‘then the only way to be an architect is by being sustainable and being a good steward.’ She went on to share three key principles to consider for environmentally-friendly projects:

1. try to choose local materials as much as possible;
2. think seriously about your energy use – and how to reduce it;
3. consider maintenance – you don’t want a building that costs a lot to run.
Each church is different. And there are so many things that can be done. Here are some examples to inspire you in your own situation.

Look at churches that model respect for the earth
Worshippers across the globe are willing to put their money where their hearts are, says Mother Nature Network. This study profiles churches from Scotland to America that have created a new paradigm for congregations, modelling respect for the planet’s natural resources and placing environmentalism alongside the virtues of purity and piety.

Find out how monastics make a difference
The Friary at Hilfield is part of the Society of St Francis, an Anglican Franciscan Religious Order. They follow the spiritual path of Francis of Assisi, patron saint of ecology. Established in 1921 on the edge of the Dorset Downs and overlooking the Blackmore Vale, Hilfield provided refuge and rehabilitation for homeless men. Today, six Franciscan brothers form the core of a larger community who work on the friary land – 19 acres of wildflower meadows and woodlands designated as Special Nature Conservation Interest – and who offer hospitality to people of diverse backgrounds and needs. Each day is shaped by a pattern of prayer, meals together, work, reflection and recreation. A Rocha UK is in partnership with Hilfield Friary because the charity shares many of the same aims in terms of caring for the land God created.
Discover how intentional communities care for creation

The sisters of Stanbrook Abbey made more than one historic move when they left their monastic home in Worcestershire, as The Guardian reported. They set up what is said to be the world’s first environmentally-friendly nunnery in North Yorkshire. The £4.7m building includes such features as:

- wood chip boiler;
- solar panels to boost hot water;
- rain water harvesting tank;
- natural materials;
- excellent thermal insulation;
- low energy light fittings;
- new ‘A’ rated appliances.

‘As Christians, we believe that God gave human beings stewardship over creation (Genesis 1:26),’ says the community.

‘As Benedictines, we try to treat everything with the same reverence as is shown to sacred altar vessels (see The Rule of St Benedict 31:10). If this holds good for things within the monastery, it extends also to God’s creation whose wonders we praise daily in the words of the Book of Psalms. So our rationale for being “green” springs from our faith and our life as Benedictines.’

THE GUARDIAN’S ARTICLE ON STANBROOK ABBEY

STANBROOK ABBEY WEBSITE
www.stanbrookabbey.org.uk/page-sustainability.html

www.ecochurch.arocha.org.uk
Discover how to save money by saving the planet
A church in the USA decided it shouldn’t care for the environment because of politics, fads, or fears of a melting world – but because they believed the Creator commanded them to do so. Along the way, they found it saved them money, too!

Explore practical ideas to fix your church
Church buildings reflect who we are as a community of faith, says a document from the National Council Of Churches USA. Although aimed at the American church scene, this practical toolkit shares important principles that apply in other situations, too. For example, Building A Firm Foundation lists some of the things that creating ‘green’ churches can do:

1. reduce energy use;
2. protect open space and valuable natural habitats;
3. reduce our churches’ contributions to global warming;
4. keep our churches safe and healthy;
5. reduce the use of toxic substances;
6. lessen pressure on the local water supply;
7. reduce run-off into local waterways;
8. reduce mining and timber harvesting;
9. address environmental justice issues;
10. connect the congregation with the created world.
Make use of repairs to make your church more eco-friendly

The greatest potential for increasing or reducing the carbon footprint of your church building could be in its repair and development. That is the message from the Diocese of Salisbury in Your Church And The Environment.

Waterless toilets – the way to go

Composting toilets save water and money, and produce fertilizer and compost that benefits the environment! All composting toilets decompose waste by creating the aerobic conditions for bacteria and other macro and micro-organisms to thrive. The objective is to destroy harmful pathogens, eliminate the risk to human health and environment, and transform the waste nutrients into fertile soil. They typically break down waste material to a small percentage of its original volume.

Compost that is too wet can become anaerobic and produce unpleasant smells. Because of this, Ecotoilets supply waterless composting toilets that separate urine from faeces. The collected urine goes through a process of nitrification, resulting in an odourless, bacteria-free liquid that can be used as a fertiliser or leached safely into the ground. The faeces and toilet paper are collected in a holding tank under the toilet seat with a composting medium using a screen to avoid any unpleasant sights and to keep out flies and other unwanted bugs. The tank either has a stirrer or rotation mechanism to distribute the material and allow even decomposition. When the tank is full it is removed and either stored until fully decomposed or added to a compost pile or rapid composter.

All composting toilets require a little management to ensure that they remain clean, hygienic and odour free. All need to have compost material removed at regular intervals. But these are minor inconveniences compared to the advantages of composting toilets. They protect groundwater, surface water and soil from sewage pollution, prevent the accumulation of hazardous pathogenic waste, and solve the problem of disposing sewage sludge to landfill. They save huge quantities of water in a world where water is an increasingly scarce resource, and require very little infrastructure.
Learn from alternative building practices and ideas

These include Passivhaus, a rigorous, voluntary standard for energy efficiency in a building, reducing its ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling. Christ Church Central in Sheffield has plans to create a new building that aligns with Passivhaus principles. This will require:

- high levels of insulation;
- triple glazing;
- mechanical ventilation heat recovery system;
- high quality construction.

Primary heating will be provided in the new building by ‘passive heat sources’ such as:

- the sun;
- human occupants;
- appliances;
- extract air.

In their project plans, Christ Church Central say the reason behind such a radical move is because ‘sustainability is important and integral to serving God while also providing a legacy for future generations’. While not every church may want to follow the Passivhaus standard, most churches could learn some valuable lessons from this pioneering construction philosophy.