What your church can do about…

Climate Change

Introduction
Do not say to your neighbor, “Come back later; I’ll give it tomorrow”-- when you now have it with you. -Proverbs 3:28

Imagine you hear a knock on the door one day and find your neighbor on the steps with a big empty bucket. “Our water is out,” she states, “can I get some from you?” Like most, you would fill her bucket and maybe even offer the use of your shower until the problem is resolved.

A few days later, you hear another knock. This time you find your entire neighborhood filling your front lawn. Each with an empty bucket. What’s worse, many have lacked water for days and now the children and older folks are suffering. You may well fill all of their buckets that day, but what happens tomorrow or the day after that?

If the scenario caused you discomfort, it may be because you want to help but feel overwhelmed. Perhaps your faith tradition requires that you provide aid and comfort to those in need, but you fear your resources are inadequate to meet the need. Maybe you would be happy to help, but don’t quite know where to start.

On a micro scale, you just experienced part of what our world’s scientific and political community forecasts as a result of global climate change. Scarce freshwater supplies are just one predicted outcome, along with mass population movements due to sea rise covering up coastal communities, drought-driven refugees and those escaping natural disaster.

You have also experienced the reason the Baptist Peace Fellowship of North America feels called to become involved in reducing and relieving the effects of climate change. Because of human actions, planet Earth and its inhabitants are experiencing some unprecedented changes in the air we breathe, the water we drink and the places we inhabit.

If you don’t feel “ready” to grapple with the issue, you have plenty of company. But please do not doubt the power you and your church community have to bring to the issue. Reaching out to inform others, making behavioral changes in your own life to reduce carbon footprints, and continuing to support others can all have positive outcomes.

This monograph was written and compiled by Chrystal Bartlett.

What BPFNA Churches Are Already Doing

We know that climate change is primarily the result of excess greenhouse gas (GHG) emissions that warm our climate and also pollute our air, water and earth. We also know that taking steps now to reduce GHG emissions will significantly reduce the impact of global warming.

Outreach is the most effective way to share climate data with the public, modeling best practices to others is an effective way to promote similar behavior in others.

Last year, many BPFNA communities responded to an environmental survey requesting data on their green journey. The survey’s findings show BPFNA churches are already playing a powerful role in both outreach and modeling best practices by using them onsite at their houses of worship.

Solar

Solar panel costs have dropped at the same time grant programs funding their installation have grown. As a result, solar is a more affordable goal than in previous years. Many BPFNA churches are reducing GHGs and improving local air quality while serving as models to others through outreach and demonstration.

Woodbine Heights in Toronto, Ontario has installed 878 square feet of solar panels that generate power for the local grid in return for power company credit. On average, the panels prevent one ton of CO2 emissions every month they are in use. At Burlington Baptist in Ontario, the solar arrays have prevented more than 10 tons of carbon from entering the local atmosphere. The system generates power for the Ontario Power Authority, which pays 80.2 cents per kilowatt hour. Amortization is expected in less than eight years, leaving a potential for future profits.

Charlotte, North Carolina is home to Myers Park Baptist Church, home of a 20-panel solar array. The array provides 1-2 percent of the church’s needs – saving them $530 per year at current rates – while it has diverted more than four tons of CO2 (so far) from the area’s skies.

Central Baptist in Wayne, Pennsylvania has operated its 48-panel solar array since 2009. Under the state’s reverse
metering law, they send plenty of power to the local grid while earning credits they can sell on the open market. The skies and the church budget are both beneficiaries.

Community Gardens
Since excess airborne GHG can be absorbed by trees and other plant matter, keeping green places green and planting in urban areas greatly improves local air quality. It’s a credit to BPFNA churches’ ingenuity that they’ve found ways to not only plant more living things, but also improve low-income urban dwellers’ access to fresh fruits and vegetables.

Community gardens also benefit local water supplies by capturing and slowing rain water runoff, which reduces urban flooding and, by letting water filter through soil, improves local water quality. Providing bird and insect habitat in concrete enclaves sustains their populations while providing ideal outdoor classrooms where youth learn how food is grown.

Myers Park in Charlotte donates all of its community garden produce – 500 pounds! – to Friendship Trays, a local charity which distributes the food to needy neighbors.

Metro Baptist, located in the Hell’s Kitchen area of Manhattan, New York managed to turn its roof into an urban garden when a 60-volunteer bucket brigade moved seven tons of earth up five flights of stairs. The 1,000 feet of soil is used to grow produce for its sister nonprofit, Rauschenbusch Metro Ministries, which distributes the food to needy neighbors.

Sometimes the neighbors in greatest need are not human.

Wedgewood Church, located in North Carolina, is the first Baptist church certified by North Carolina Wildlife Federation’s “Faith Actions Impacting the Habitat” garden program. The non-denominational designation recognizes places of worship that meet crucial requirements for a wildlife-friendly habitat. Wedgewood not only provides shelter, water, food and native plants for wildlife (watered by rain barrels!), it also maintains a butterfly garden, compost patch and recycling program. They are also hard at work building a nature trail. Wedgewood’s use of the site to teach and set an example for others provides a powerful model for those seeking knowledge about sustainable practices.

Energy Audits
Most of the energy used in industrialized nations comes from coal-fired power plants that emit GHGs, mercury and particulate matter that worsens respiratory health. When we reduce the amount of energy we use, we reduce our carbon footprint.

Energy audits are an excellent method to detect ways buildings can use less energy and maximize what they do use. Many state and regional environmental agencies offer grants for energy audits, which often pay for themselves over time through amortization.

Some audit suggestions are as simple as opening drapes to use daylight instead of lights or weather stripping windows and doors. Other steps, such as replacing aging boilers for more energy-efficient models, require higher up-front costs but produce significant savings which can be used to defray audit costs.

Pullen Memorial Baptist Church in Raleigh, NC received a free energy audit in 2009 in return for hosting a local church workshop on energy reduction. Both Pullen’s original building, which dates back to 1923, and its ‘green as can be’ addition were audited. The results were surprising.

Learning that energy leaks from badly sealed doors, windows and exterior walls was expected; an icemaker was running 24-7 despite being used only a few times a week in the old building; in the new building, appliances remained plugged in and drawing current when not in use; and a room vent placed too close to an air return confused the thermostat, which increased the power bill. The lesson here is that one may have a green building, but what one does within that structure has a huge impact on the energy usage.

When Myers Park Baptist in Charlotte secured a reduced cost energy audit through the state’s energy office, the findings were so compelling that they took immediate action, according to energy effort spokesperson Bob Thomason. Weather stripping the doors cost little but saved enough to repay the engineer ($800) in one year. Upgrading their HVAC computer control system would save $25,000 annually, so the church installed it during the study. Variable speed drives for HVAC efficiency, motion sensors for stair hall and bathroom lights cost more and took longer, but made significant environmental and financial impacts. Because of the changes, Myers Park is now pursuing a Leadership in Energy Efficient Design (LEED) designation for Existing Buildings.

Green Construction
Since the U.S. devotes one-third of its total energy consumption to heating and cooling buildings, LEED designations for commercial buildings have become increasingly attractive. The “green” designation is great public relations, but the primary driver is how much the buildings save in energy costs over time.

LEED Points are awarded for everything from using recycled building materials to energy efficiency and renewable construction materials. If energy audits offer a great way to retrofit energy savings into existing structures, sustainable design for new construction can build energy savings into the structure.
Pullen Memorial Baptist Church’s addition was built in 2009 using sustainable design practices. Despite the higher costs, the church paid for every green building element it could afford, including recycled metal walls and roof shingles that never need painting; daylighting for optimal natural light use and motion-sensing lights in halls, bathroom and stairways to reduce light usage.

A 7,500 square foot green roof captures and cools stormwater runoff while cooling the space below. The church also invested in a geothermal HVAC system that saves $6,000 yearly compared to conventional systems. The system prevents 125 tons of CO2 emissions – the same weight as the Statue of Liberty’s steel frame – from entering the atmosphere each year.

Clearly, many BPFNA churches are already making strides to reduce the impacts of climate change. If your church community is starting to explore its role vis-à-vis climate change, there is plenty of inspiration here! Better yet, each church surveyed has generously offered to share their knowledge with other churches interested in pursuing similar projects. Contact us at bpfna@bpfna.org if you’d like to be connected with one of these churches to learn more.

Conflict or Collaboration?

Is it not to share your food with the hungry and to provide the poor wanderer with shelter—when you see the naked, to clothe him, and not to turn away from your own flesh and blood? -Isaiah 58:7

Many climate change projections exist and none of them are pretty. An interesting point to consider is that most projections are based on the premise that no action to address climate change will occur. No one can predict the future, so this is good statistical practice, but it is also true that actions taken to address climate change will dramatically alter current predictions.

Developed nations are aware of the potential for conflict over scarce resources and the burdens that refugees may place on their borders, resources and security. “The links between climate change, economic development and international security are increasingly evident” (Gleick, 1992, p. 127).

Global projections estimate 1 billion migrants between now and 2050 may destabilize regions where increasingly desperate populations compete for dwindling food and water (Human Tide, 2007, p. 2). By 2080, the Intergovernmental Panel on Climate Change projects 1.1 to 3.2 billion people will lack enough water, 200 to 600 million will lack enough food and 2 to 7 million more per year will be escaping coastal flooding (p. 48, 2007).

On a regional basis, rain patterns in Latin America will change and disappearing glaciers in the Arctic will decrease the water available for drinking, agriculture and energy generation. The western mountains in North America will lose snowpack, increasing competition in an area already short of water. Canada’s prairies will be forced northward, along with its forests, destabilizing established agricultural regions (NASA, 2012).

The prospect of climate change refugees is very real and not confined to any one area of the globe. Developed countries’ defense and military organizations are planning to tighten international, national and regional boundaries as a result. (Kalin & Schrepfer, 2012, p.78).

Because trans-boundary waters are considered one of the most likely places for conflict to rise, most plans revolve around water. India and Pakistan have already experienced armed conflict regarding water supplies, though other tensions between the two countries may have impacted the severity of the outcome (Reynolds, Remarks, 2010). But these dire predictions don’t have to come to be!

Many peace-minded individuals and organizations find these militaristic scenarios deeply troubling. “Claims of environmental determinism leading seamlessly from climate change to open warfare are suspect. The overly structural logic linking climate change to armed conflict ignores human agency, ingenuity, the potential for technological innovation, and the vital role of political institutions in managing conflict (or failing to do so)” (Salehyan, 2008, p. 317).

Pragmatists also agree; notably because “societies across the world have a long record of adapting and reducing their vulnerability to the impacts of weather- and climate-related events such as floods, droughts and storms.” (IPCC, 2007, p. 56). In fact, they have high confidence that viable adaptation options can be implemented in some of these sectors at low cost and/or with high benefit-cost ratios but caution that higher benefit-cost ratios can be achieved by implementing some adaptation measures at an early stage compared to retrofitting long-lived infrastructure at a later date. (Ibid.)

Canada’s Regional Adaptation Collaboratives, a $30 million cost-shared federal program, helps Canadians prepare for and adapt to decreasing fresh water supplies, increasing droughts, floods and coastal erosion and changing forestry, fisheries and agricultural resources. The goal to reduce the risks and maximize the opportunities posed by climate change is one excellent example of early stage action.

Mexico’s General Law on Climate Change, passed on April 19, 2012 is another example. It sets a target on greenhouse gas emissions, stipulates that 35 percent of Mexico’s energy must come from renewable sources by 2024, and says government agencies will be obliged to use renewables.

Mediation, arbitration, and alternative dispute-resolution mechanisms at the local and international levels can prevent conflicts from arising, according to Salehyan (2008, p. 323). Clearly there is a vital role for the peacemakers of the world to assist in the future negotiations needed to turn potential conflict into life-sustaining collaboration.

The IPCC has created a list of adaptive strategies along with the existing barriers to implementation. Local, regional, national and international work will be needed to turn these strategies into realities. The work will be hard and frustrating, but the consequences of not taking action are clear. Instead of investing our energy in zero-sum resource protection, we can choose to adapt to climate change impacts by working with one another, in community and with compassion, on the challenges that lay ahead.

Whether working singularly or collectively, people must make the same decision: whether to fight over climate change or work together in finding solutions. Peacemaking is hard: beating swords into plowshares and turning spears
### Getting Involved

*For we are God’s workmanship, created in Christ Jesus to do good works, which God prepared in advance for us to do. -Ephesians 2:10*

Reducing the impact of climate change is possible, but it won’t be easy. However, many opportunities exist for individuals and organizations to get involved. Skill sets, personalities, and specialities abound, but finding the best fit is key to sustaining long-term involvement.


“Even if the situation appears appropriate for a collaborative effort, a particular individual or your organization may not be suited. Is the effort consistent with the organizational mission? Will a representative be able to prepare for and attend meetings? Does the organization have a representative with sufficient time and expertise to participate effectively? Is it better to avoid the process altogether than to participate in an ineffective and possible counterproductive manner?”

Answering these questions individually or in dialog with your church will help everyone find the most effective and comfortable path for future advocacy actions.

Literature on social advocacy effectiveness suggests outreach to get people talking is the best way to approach situations where communities face “great uncertainty but substantial risks” (Ferguson and Schenk, 2011, Consensus Building Institute).

Simply put, when a variety of opposing views exists, stakeholders need forums to explore why others hold differing views, to share information and build group understanding. Supporting the stakeholder process through role-play and facilitation is integral to success.

Providing expert information is vital as is participating in the process itself. Each role requires different skills and, in some cases, personalities, providing a variety of platforms for participation.

In the Lincoln Institute of Land Policy’s working paper, “Coastal States’ Climate Adaptation Initiatives: Sea Level Rise and Municipal Engagement,” one interview participant noted that, “many committees set up at the local level to address environmental issues are marginalized because their members are exceedingly passionate but seen as one-sided.” (p. 20, 2012) Instead, issue advocates seen as legitimate by all must be found throughout municipal governments and the wider community.

Collaborative action, among cities, states, nations and international associations will be essential in addressing the global issues with increasing local impacts. The good news, according to the authors of *Collaboration: A Guide for Environmental Advocates*, is that citizen-driven decision-making is growing in many federal agencies. Community-based collaborative and citizen advisory committees may play a greater role in future land use and resource sharing agreements (Institute for Environmental Negotiation, p. 8, 2001).
Taking good environmental actions on an individual or organizational basis doesn’t only reduce the impact of future climate changes. Many BPFNA churches have already found ways to increase their stewardship of God’s creation and also serve as informative and motivational models for others. If your church is not taking steps already, would they be willing to consider adopting new behaviors? If the church is already taking action, how may they spread the lessons learned? Would members be willing to serve as expert consultants for other groups? Offer open houses to show their care for creation in action? Discerning future actions – whether individual or collaborative – can be a powerful dialog for churches and their members to undertake.

Frequently Asked Questions
The heart of the discerning acquires knowledge; the ears of the wise seek it out. -Proverbs 18:15.

Most of us already know a great deal about climate change, but the FAQ below serves two purposes. The first goal is to provide you with the latest data on a complex topic. The second goal is to prepare you for dialog with all the parties involved: those who agree climate change is real and requires a human response, those who are still deciding and those who refute the scientific predictions and see no reason to act.

Literature on attitude change informs us that those who hold polarized positions are rarely moved by opposing arguments. However, the data is clear that individuals who are undecided are often swayed most effectively by data, and, in some cases, rhetoric.

Q: What, exactly, is climate change?
A: The United Nations Framework Convention on Climate Change defines it as “a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods.”

Q: Isn’t climate change fake science?
A: Scientists may disagree on specific aspects of climate change, but international agreement exists that climate change is happening and is primarily caused by excess greenhouse gases from human activities. The largest growth in GHG emissions between 1970 and 2004 has come from energy supply, transport and industry.

Q: What evidence has been given to prove climate change exists?
A: The global average temperature increased by more than 1.4°F over the last century. According to the National Oceanic and Atmospheric Administration, 2000 to 2010 was the warmest decade on record. The rise in global temperatures was accompanied by weather and climate changes including excess rainfall; drought; more frequent and severe heat waves; warmer, more acidic ocean temperatures; melting ice caps and rising sea levels.

Q: OK, I agree the global temperature is rising, but aren’t such changes natural?
A: To a certain degree. Earth naturally cycles through warming and cooling phases, caused by changes in the sun or volcanic activity. Even when scientists account for these natural impacts, the warming noted in the last 50 years cannot be attributed solely to natural factors.

Q: How can carbon dioxide be bad for us? Plants need it and it occurs naturally.
A: Any “good” substance, in excess, can be harmful. Earth needs naturally occurring carbon dioxide, but ice core measurements show atmospheric carbon dioxide levels are the highest they have been for at least 800,000 years. The excess, created by industrial activity, is what causes global warming.

Q: What’s the big deal about sea levels rising? A few inches won’t hurt, right?
A: Sea levels rose an average of 9 inches in the past 140 years. By 2100, they are expected to rise another 1.5 to 3 feet, increasing the risk of coastal flooding for hundreds of millions of people around the world. Many of these people will need to permanently leave their homes.

Q: If we can’t get the extra greenhouse gas out of the atmosphere, isn’t it too late to do anything?
A: We can still significantly impact future climate change and its effects. Appropriate actions taken by governments, communities, individuals and businesses can greatly reduce the amount of greenhouse gas pollution we release, lowering the risk of greater warming. In the United States alone, greenhouse gas emissions have increased by 10.5 percent since 1990; the increase between 2009 and 2010 is 3.2 percent. Obviously, much work remains to be done to address the problem in the U.S. and in other nations.
When it comes to Climate Change, it’s about perspective. Just as some see the “old lady” and others see the “young lady” in the image, individual perspectives can limit our vision.

While climate change is a large problem affecting us all, and something that should not be ignored, it also presents unprecedented opportunities for people and groups to work together to heal our planet. It has inspired new green technologies, added needed jobs to the economy, reduced carbon emissions, improved our health and inspired people around the world to make Planet Earth a better place.

References & Resources

Introduction

FAQ


Conflicts or Collaboration?


Getting Involved

Ferguson, O. and Schenk, T. “What Have We Learned About Climate Change Advocacy?”, Consensus Building Institute, retrieved from http://www.cbuilding.org/tools.


RESOURCES

Consensus Building Institute - http://www.cbuilding.org/tools
Lincoln Institute of Land Policy

The PICO Community Organizing Model
http://www.piconetwork.org/about/model

National Coalition for Dialogue and Deliberation: Resource Guide on Public Engagement

Institute for Environmental Negotiation, University of Virginia
http://ien.arch.virginia.edu/publications

Regional Adaptive Collaboratives, Natural Resources Canada

Government of Mexico, Environment, Natural Resources & Fisheries Ministry (Español) - http://www.ine.gob.mx/

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