

'LET THE HILLS SING TOGETHER' ECO-JUSTICE AND CLIMATE CHANGE

PROPER 28, YEAR C

Lectionary Texts: Isaiah 65:17-25	Isaiah 12	Psalm 98
2 Thessalonians 3:6-13	Luke 21:5-19	

Focus Text: Psalm 98

¹O sing to the LORD a new song, for the Lord has done marvelous things. God's right hand and holy arm have gained victory. ²The LORD has made known this victory; God has revealed this vindication in the sight of the nations. ³God has remembered God's steadfast love and faithfulness to the house of Israel. All the ends of the earth have seen the victory of our God. ⁴Make a joyful noise to the LORD, all the earth; break forth into joyous song and sing praises. ⁵Sing praises to the LORD with the lyre, with the lyre and the sound of melody. ⁶With trumpets and the sound of the horn make a joyful noise before the Sovereign, the LORD. ⁷Let the sea roar, and all that fills it; the world and those who live in it. ⁸Let the floods clap their hands; let the hills sing together for joy ⁹at the presence of the Lord, for God is coming to judge the earth. God will judge the world with righteousness, and the peoples with equity.

NRSV

ADDITIONAL TEXTS

In the beginning when God created the heavens and the earth, the earth was a formless void and darkness covered the face of the deep, while a wind from God swept over the face of the waters.... Then God said, "Let the earth put forth vegetation: plants yielding seed, and fruit trees of every kind on earth that bear fruit with the seed in it." ...And God saw that it was good.... And God said, "Let the waters bring forth swarms of living creatures, and let birds fly above the earth across the dome of the sky." So God created the great sea monsters and every living creature that moves, of every kind, with which the waters swarm, and every winged bird of every kind. And God saw that it was good. God blessed them, saying, "Be fruitful and multiply and fill the waters in the seas, and let birds multiply on the earth." ...God made the wild animals of the earth of every kind, and the cattle of every kind, and everything that creeps upon the ground of every kind. And God saw that it was good. Genesis 1:1-25

Then God said to Noah and to his sons with him, "As for me, I am establishing my covenant with you and your descendants after you, and with every living creature that is with you, the birds, the domestic animals, and every animal of the earth with you, as many as came out of the ark. I establish my covenant with you, that never again shall all flesh be cut off by the waters of a flood, and never again shall there be a flood to destroy the earth." Genesis 9:8-11

For I am about to create new heavens and a new earth; the former things shall not be remembered or come to mind. But be glad and rejoice for ever in what I am creating; for I am about to create Jerusalem as a joy, and its people as a delight. I will rejoice in Jerusalem, and delight in my people; no more shall the sound of weeping be heard in it, or the cry of distress... They shall build houses and inhabit them; they shall plant vineyards and eat their fruit. They shall not build and another inhabit; they shall not plant and another eat; for like the days of a tree shall the days of my people be, and my chosen shall long enjoy the work of their hands. Isaiah 65:17-22

Then the LORD answered Job out of the whirlwind: "Where were you when I laid the foundation of the earth? ...Can you lift up your voice to the clouds, so that a flood of waters may cover you? Can you send forth lightnings, so that they may go and say to you, 'Here we are'? Who has put wisdom in the inward parts, or given understanding to the mind? Who has the wisdom to number the clouds? Or who can tilt the waterskins of the heavens, when the dust runs into a mass and the clods cling together? Can you hunt the prey for the lion, or satisfy the appetite of the young lions, when they crouch in their dens, or lie in wait in their covert? Who provides for the raven its prey, when its young ones cry to God, and wander about for lack of food?" Job 38:1-7, 34-41

For the creation waits with eager longing for the revealing of the children of God... in hope that the creation itself will be set free from its bondage to decay and will obtain the freedom of the glory of the children of God. Romans 8:19-21

SCRIPTURE COMMENTARY & PASTORAL REFLECTION

BY DR. ED HAUSER, PROFESSOR EMERITUS OF BIOLOGY; CHAIR, CARING FOR CREATION TASK FORCE, NORTH CAROLINA SYNOD, EVANGELICAL LUTHERAN CHURCH IN AMERICA

Our lectionary texts, Isaiah 65:17-25 and Psalm 98, offer vision and hope for people of faith, a vision of ultimate peace among the whole of creation. The Hebrew word which implies such a state of being is *shalom*. The word *shalom* has a deep and rich meaning, implying not only a lack of hostility towards the creation and all God's creatures, but also a state of general health and well being, a condition where there is "ecojustice" for all parts of creation. Thus, any acts on the part of humans which are counter to God's creative handiwork are also counter to God's will for creation. To degrade the earth and its living and nonliving components is to destroy *shalom* and to work against the purposes of

God for a living earth.

Selected readings from Corinthians 12: 12-26 reinforce the idea of *shalom* as a peaceful network of interrelationships that benefit all of God's creation: "Indeed the body does not consist of one member, but of many.... But as it is, God arranged the members in the body, each one of them, as God chose.... if one member suffers, all suffer together with it."

The interrelationships depicted above also apply to all of earth's members and the totality of the creation. If the waters or the air are unhealthy, all members suffer. Furthermore, we as humans have two sets of dependencies: 1) we can only obtain our food and energy from the lower segments of the food web, i.e., other plants and animals, and 2) we depend upon clean water and air to meet the needs of the circulatory and respiratory members of our body. What, then, do we need to learn about the other members of creation? Perhaps the answer lies in Job 12: 7-10: "But ask the animals and they will teach you, or the birds of the air and they will tell you; or speak to the earth and it will teach you, or let the fish of the sea inform you."

What is the status of the creatures on the earth today, and what are they telling us? Leading ecologists point out that we are losing a species or more each day. This present day rate of extinction exceeds any in the history of the earth, including that affiliated with the loss of the dinosaurs. Within the next 50-100 years, it is estimated that more than 50% of all species will be lost or endangered. Recent studies indicate that with loss and change of critical habitat, the extinction rate for birds and amphibians is expected to be 100 to 1000 times beyond the rate of the past 10,000 years. The fisheries of the oceans will be completely depleted within the next 50-100 years under current conditions of exploitation and water pollution. Most of all, the human species will face unprecedented obstacles as a rising population, developing countries, terrorist groups, and the most affluent nations fight for any remaining resources such as food, energy, water, and land. In addition, the spread of disease vectors will increase health problems on a scale paralleling or exceeding that of previous flu and plague epidemics.

But beyond these concerns, we see that the earth also has a fever! The consensus of the scientific community is that the average temperature of the earth is increasing rapidly as humankind uses more fossil fuels and releases increasing amounts of carbon dioxide into the greenhouse layer of the atmosphere. When a child has a slight temperature rise between 99 degrees and 100, we as adults become concerned and provide the child with aspirin, rest, and fluids. If the temperature continues to rise, we see the doctor, a diagnosis is made, and we take appropriate prescriptive measures. If the temperature gets into the 102-104 degree range, we take drastic intervention measures, including cooling down techniques and hospitalization.

The earth is now experiencing a fever unprecedented in past geologic history, a history which includes both ice ages and warming trends. A scientific consensus exists among experts, including leading zoologists, botanists, geologists, ecologists, climatologists, glacial physicists, and oceanographers, telling us that the earth's temperature is rising and will continue to go up. Ecosystems and the native species they support are becoming endangered. Using the above human analogy, small measures are no longer enough, and drastic intervention is needed.

It should be obvious that the birds, the fish, and indeed, all living creatures and the earth itself are talking to us. They are telling us that the earth and its members are hurting. Its bloodstream, the waters of our streams, lakes, and oceans are becoming increasingly polluted. The air is becoming increasingly unhealthy, as sulfuric and nitric acids, mercury compounds, and many other constituents reach toxic levels.

Why are the changes occurring? The answer lies with the greenhouse layer of our atmosphere. Over billions of years, this layer has achieved a point of equilibrium whereby carbon dioxide has reached a density of 90%. This density is perfect for trapping much of the sun's radiant energy and retaining it as absorbed heat energy. Since the Industrial Revolution, however, and especially over the past 40 years, carbon dioxide levels have increased dramatically. Where does excessive carbon dioxide come from? The major culprit is the burning of fossil fuels to meet our energy demands. Most electrical generating power plants use coal; our automobiles and transport vehicles use petroleum products.

Now, let's take a brief look at how the Bible describes the relationship we should hold with creation and its creatures. The first biblical "endangered species act" comes from Genesis 6:19-22 and the command given to Noah. "You are to bring into the ark two of all living creatures, male and female, to keep them alive with you. Two of every kind of bird, of every kind of animal, and of every kind of animal that moves along the ground will come to you to be kept alive. You are to take every kind of food that is to be eaten and store it away as food for you and for them. Noah did everything as God commanded him."

A second reading from Genesis 9: 8-14 describes the covenant God established between God, humankind, the creatures, and the earth. It recognizes in a holistic way that all the members of the earth - not just humans - are interrelated and interdependent, like the members of our body. It can be considered to be part of the First Law of Ecology: "Environmental Unity." "Then God said to Noah and to his sons with him: I now establish my covenant with you and with your descendants after you, and with every living creature that was with you - the birds, the livestock, and all the wild animals, all those that came out of the ark with you - every living creature on earth."

This covenant represents a compelling message for us as Christians who seek understanding about appropriate action on behalf of God's creation. The ELCA Social Statement on *Caring for Creation*, subtitled *Vision, Hope, and Justice*, offers a way to reflect theologically on our responsibility. This statement points out that Christian concern for the environment is shaped by the Word of God spoken in Creation, the love of God hanging on a cross, and the Breath of God renewing the face of the earth. Thus, care for the earth is a profoundly spiritual matter. Humans, in service to God, have special roles on behalf of the whole of creation. Our role within the creation is to keep God's garden, the earth. "To serve" is often translated "to till" and means for us to be the servant species of the earth, as God keeps and cares for us. We are called to live according to God's wisdom in creation. In our time, science and technology help us discover how to live according to God's creative wisdom. The term typically used today is "sustainability," which means to implement a lifestyle today that will assure natural resources and elements are available for future generations to use in a way that will not diminish the quality of life for all humans and creatures of the earth.

Some ecotheologians believe that the crisis we face is that of the human mind. We do not listen; we think that the earth's members are too large and vast to be polluted, that global warming, air and water pollution are myths. We deny the science that is being presented to us and feel the environment is apart from us. Indeed: "The Lord saw that the wickedness of humankind was great in the earth. . . And the Lord was sorry to have made humankind on the earth" (Genesis 6:5-6).

The Bible offers clear guidance as to what should be the nature of our vocation as stewards of the earth. "What good is it, my brothers and sisters, if you claim to have faith but do no good deeds? Can such faith save you? Suppose a brother or sister is without clothes and daily food. If one of you says to them, 'Go; I wish you well, keep warm and well fed', but does nothing about their physical needs, what good is it? In the same way, faith by itself, if it is not accompanied by action, is dead. You see that a person is justified by works and not by faith alone. As the body without the spirit is dead, so faith without deeds is dead." (James 2: 14ff).

In light of what we know about the condition of the earth, acts are immediately needed at all levels, starting with ourselves. We can reduce our energy consumption habits in many different ways without degrading our quality of life. For example, if every household in North Carolina would install four compact florescent light bulbs, we would not need to build the nuclear or coal-fired power plant Duke Power is proposing. If all the households of this state would install CFL bulbs throughout every home, we could take a power plant off the grid. That is the single most cost effective thing we can do and significantly reduce energy consumption. One such bulb uses 1/4th the energy of a standard incandescent bulb and lasts up to seven years. We can carpool; we can combine chores or tasks so as to minimize our driving trips. We can buy a more energy efficient auto; we can caulk and seal air leaks in our home. We can improve insulation levels, and we can utilize energy star appliances. If the U.S. population were to make these lifestyle changes, we would reduce energy consumption and power plant emissions back to pre-1970 levels.

We can accomplish this if we have the will, the spirit, and the deeds to follow through on our responsibility as Christians, to enliven our faith with deeds and not just words. "Praise to the Lord God, who alone does marvelous deeds. Praise to God's name forever; may the whole earth be filled with God's glory" (Psalm 72: 18 - 19).

WORSHIP AID - 'LET THE HILLS SING TOGETHER'

RESPONSIVE READING

For the marvelous grace of Your Creation - We pour out our thanks to You, our God,

For sun and moon and stars, for rain and dew and winds, for winter cold and summer heat.

We pour forth our praise to You for mountains and hills, for springs and valleys, for rivers and seas.

We praise You, O Lord, for plants growing in earth and water, for life inhabiting lakes and seas,

For life creeping in soils and land, for creatures living in wetlands and waters,

For life flying above the earth and sea, for beasts dwelling in woods and fields.

How many and wonderful are Your works, our God! In wisdom you have made them all!

But we confess, dear Lord, as creatures privileged with the care and keeping of Your Creation,

That we have abused your Creation gifts through arrogance, ignorance, and greed.

We confess risking permanent damage to Your handiwork;

We confess impoverishing Creation's ability to bring You praise.

Yet, we confess that Your handiwork provides the context for our living;

It is our home, it is the realm in which we live the life of Your kingdom,

Your kingdom that is now in our midst and coming yet more fully.

We confess, Lord, that we often are unaware of how deeply we have hurt Your good earth and its marvelous gifts.

We confess that we often are unaware of how our abuse of Creation has also been an abuse of ourselves.

O Lord, how long will it take before we awaken to what we have done?

How many waters must we pollute? How many woodlots must we destroy?

How many forests must we despoil? How much soil must we erode and poison, O Lord?

How much of Earth's atmosphere must we contaminate? How many species must we abuse and extinguish?

How many people must we degrade and kill with toxic wastes before we learn to love and respect your Creation,

Before we learn to love and respect our home?

For our wrongs, Lord, we ask forgiveness.

In sorrow for what we have done we offer our repentance.

We pray that our actions toward You and Your Creation are worthy of our repentance,

That we will so act here on earth that heaven will not be a shock to us.

We promise to reverence Your Creation as a gracious gift entrusted to us by You, our God.

We promise anew to be stewards and not pillagers of what You have entrusted to us.

Creator God, You have given us every reason to learn this wisdom of lives lived in harmony with Creation.

May we, your servants, increasingly serve.

**May we, your servants, increasingly come to love Your Creation as we increasingly come to love You,
Through Jesus Christ, our Lord. Amen.**

(adapted from "A Prayer of Thanksgiving and Confession," <http://arb0rv1tae.typepad.com/sisterearth/ecotheology/index.html>)

PRAYER OF CONFESSION

Creator God, this is such a beautiful world, both fragile and resilient.

Forgive us when we act as if this world belongs to us, rather than you.

May our desire to love all of life grow; may our ability to act lovingly toward all of life grow.

Thank you for these people and this time together.

Help us to continue to support one another in our journeys.

Use us to bring about a world more compassionate and just,

Where all people and all creation enjoy and share in life's bounty. **Amen.**

(adapted from "A Call for Climate Justice," www.protectingcreation.org/documents/CryOfCreation.pdf)

SUGGESTED HYMNS

- ❖ *All Creatures of Our God and King* TH 400/UMH 62/CM 5/AM 50/
(To You, O God, All Creatures Sing) BH 27/PH 455/CH 22/GA 533
- ❖ *We Cannot Own the Sunlit Sky* NCH 563/CH 684/GA 710
- ❖ *I Sing the Almighty Power of God* UMH 152/BH42/LW 441/PH 288/
TH 398/NCH 12/CH 64
- ❖ *This Is My Father's World* AM 47/CM 34/CH 59/MW 456/
(This Is God's Wondrous World) BH 43/PH 293/TH 651/UMH 144

◆ Hymnal Legend ◆

- † AM — African Methodist Episcopal
- † BH — Baptist Hymnal
- † CH — Chalice Hymnal (Disciples of Christ)
- † CM — Christian Methodist Episcopal
- † GA — Gather Hymnal (Roman Catholic)
- † LW — Lutheran Worship
- † MW — Moravian Book of Worship
- † NCH — New Century Hymnal (UCC)
- † PH — Presbyterian Hymnal
- † TH — The Hymnal 1982 (Episcopal)
- † UMH — United Methodist Hymnal

ADDITIONAL PRAYERS

Prayer of Invocation

Hail, God of life, Maker of the universe!
Today we join with birds and trees and animals,
with rocks and rivers and mountains,
to worship and adore you as the One
who brings all beings to their birth!

Hail, Christ of the spheres, child of God's wisdom!
In your womb the universe was made;
but in your love you emptied yourself of all divinity
and took the way of ultimate suffering.
We have gathered this day to sing our thanks!

Hail, Spirit Holy, breath of God's life and primal fire!
You dwell in our souls as the instinct for love and justice;
you clear our eyes to appreciate beauty and celebrate life.
You are the voice of calm and the fire of passion.
Ignite our worship, make us lovers of God!

(by Garry Deverell, "Eco-Justice Programs," www.toad.net/~cassandra/deverell.htm)

Opening Prayer

We call upon all that we hold most sacred, the presence and power of God the Creator.
Teach us to care for the earth, our planet home with its beautiful depths and soaring heights,
its vitality and the abundance of life.
Help us to live simply that others may simply live.
We make this prayer through Jesus Christ, your Son. **Amen.**

(from The Sisters of St. Francis of Philadelphia, "Earth Day Prayer Service," http://www.osfphila.org/sp/pryr_svcs/prayer_earth_day.html)

God Speaks, Earth Speaks

God speaks through rocks and trees and water,
And the words "Peace be with you" are heard.
God speaks through budding flowers and twinkling stars,
And surely "Peace be with you" is heard.
God speaks, and is still speaking, when every living creature on earth breathes:
"Peace be with you. Peace be with you."

(Pause)

But some do not hear the words.

Some do not hear God speaking through the land or the sea or the air.

They doubt.

God speaks, but they do not hear.

(Pause)

God speaks, but do we listen?

Must we touch the scars on the soil or put our hands through the ozone layer to believe?

Must we have proof of God's presence among us in order to act?

Or can we believe without seeing. . .

Can we hear creation's blessing of "peace be with you," and respond in kind?

God speaks.

God speaks!

God speaks through the sunrise and the sunset, "Peace be with you."

And we are granted another day to respond. Thanks be to God!

(by Kelly Jo Clark, "God Speaks, Earth Speaks" <http://www.eco-justice.org/GodSpeak.pdf>)

ADDITIONAL HELPS

▣ QUOTES ▣

Shame on us if 100 or 200 years from now our grandchildren and great-grandchildren are living on a planet that has been irreparably damaged by global warming, and they ask, "How could those who came before us, who saw this coming, have let this happen?"

Joe Lieberman

While human-induced global warming is not going to turn present-day Earth into present-day Mars, global warming is dire enough that our most distinguished scientists recently concluded that as many as 1 million species on the planet could be extinct by 2050 if affairs do not change.

Jay Inslee

Climate change is the most severe problem that we are facing today, more serious even than the threat of terrorism.

David King

Global warming is too serious for the world any longer to ignore its danger or split into opposing factions on it.

Tony Blair

The world won't come to an end, but the incidence of disasters will have a very big impact, and in ways we can't predict.... Rises in seas levels will displace millions of people. It's estimated there will be 150 million refugees by 2050, homeless as a result of global warming. It's how we deal with these problems that is as much the challenge as tackling the causes of global warming.

John Theodore Houghton

▪ PERSONAL VIGNETTE ▪

A PERSONAL PERSPECTIVE ON GLOBAL WARMING

BY EDWARD O'CONNOR, CHAIR, BOARD OF EDUCATION, SOUTHERN PROVINCE, MORAVIAN CHURCH IN AMERICA;
MEMBER, STEERING COMMITTEE, NORTH CAROLINA INTERFAITH POWER AND LIGHT

I grew up on a farm in central Wisconsin that bordered a two-mile long lake. Our house was on a point of land that jutted out into the center of the lake. A similar point from the other side formed a "narrows," giving the lake the shape of a peanut shell. Since my great-grandfather had pioneered there in the 1840's, our family observed that the level of the lake rose and fell in a twenty-one year cycle. When the water was low, the narrow portion of the lake was only knee deep; when the water was high, it was necessary to swim across. In the 1970's, however, the water went down and has not come back up since. That was the time when potato farmers around the lake began irrigating. The pumping kept the water table low and broke the ancient cycle. That was a vivid example for me of how a natural cycle can be altered, quickly and drastically, by human activity.

When I became chair of the Commission on Church and Society for the Southern Province of the Moravian Church in 2002, we determined that a top priority would be climate change. I represented the Commission as a member of the Steering Committee of the NC Council of Churches Climate Connection program (now called NC Interfaith Power and Light - NCIPL). A series of events initiated me from a novice to someone who could serve as a resource for our churches. First, we sent to all Moravian Churches in the Province a packet that contained a Moravian doctrinal statement "Caring for Creation," the National Council of Churches' study manual "It's God's World: Christians, Care for Creation and Global Warming," and the Environmental Defense publication "Understanding Climate Change for North Carolina." Individual churches began using these resources and educating members. For example, Grace Moravian Church in Mount Airy held two programs on global warming and energy savings using this material.

Then, in 2005, I served as Local Arrangements Chair for the Climate Connection Earth Day program on "Faith Communities and Global Climate Change." This also opened my eyes to a number of resources. As a result of that program, I was asked to speak on global warming at several Moravian churches. As a career teacher, I knew that preparation was essential and found authoritative information in a variety of publications: *National Geographic*, September 2004, on "Global Warming;" Ross Gelbspan's *Boiling Point*, especially for the political perspective; Lester R. Brown's *Plan B 2.0*, an economic perspective; James Gustave Speth's *Red Sky in the Morning: America and the Crisis of the Global Environment*, a thorough review of the scientific perspective; and Tim Flannery's *The Weather Makers*, an historical perspective with suggestions for action. I mention these resources because some of us are inclined to say, "How can I speak on this subject when I am not an expert?" The fact is that we can all become well informed with resources that are readily available. We are not starting from scratch; it is not a mystery. And, it is urgent.

In the workshops I offer which are based on the NCIPL "Hope Workshop" format, I encourage participants to talk about what creation means to them and then go on to define the terms "global warming" and "global climate change." We discuss what the experts say about the phenomenon, describe the greenhouse gas effect (with charts from "It's God's World"), present facts on changes that have already occurred, present the National Council's video "God's Creation and Global Warming," talk about advocacy and energy conservation and efficiency, and distribute practical guides to energy savings such as NCIPL's "Ten Simple Things To Do To Reduce Global Warming."

I believe that a number of circumstances are coming together to make the public more aware and receptive to the need to reverse global warming. Al Gore's *An Inconvenient Truth* has reached millions of people. Newspaper editorials are showing greater understanding of the problem. There is a growing commitment to "green" buildings and alternative fuels. We all can add to the momentum.

▪ CONTACTS AND OTHER RESOURCES ▪

- ✦ www.nccouncilofchurches.org/areasofwork/committees/climate_connection/climate_connection.html – NC Interfaith Power & Light is an interfaith eco-justice network affiliate of the North Carolina Council of Churches. NCIPL works with faith communities in North Carolina to address the causes and consequences of global climate change through education and public policy advocacy. This committee also serves as a link between people of faith and the scientific community, seeking to broaden the involvement of faith communities in the tasks of eco-justice.

- ✦ www.ncgreenpower.org – *NC GreenPower* is an independent, nonprofit organization established to improve North Carolina’s environment through voluntary contributions toward renewable energy. A landmark initiative, NC GreenPower is the first statewide green energy program in the nation supported by all the state’s utilities and is administered by Advanced Energy, an independent nonprofit corporation located in Raleigh, N.C. The goal of NC GreenPower is to supplement the state’s existing power supply with more green energy – electricity generated from renewable resources like the sun, wind and organic matter.
- ✦ www.ncsustainableenergy.org *NCSEA* works to ensure a sustainable future by promoting renewable energy and energy efficiency in North Carolina through education, public policy and economic development.
- ✦ www.webofcreation.org – *Web of Creation* provides ecology resources to transform both faith and society, supporting efforts to live, work and pray in ways that promote eco-justice. This website has been developed to provide information and connections for theological students interested in environmental ministry and is maintained by the Lutheran School of Theology at Chicago.
- ✦ www.ncccecojustice.org – Home of the *National Council of Churches Eco-Justice Programs*, this website offers materials for worship, teaching, policy and advocacy. It comprehensively addresses numerous eco-justice issues, including climate change and global warming, from a faith-based perspective.
- ✦ www.theregenerationproject.org – *The Regeneration Project* is a nationwide interfaith organization dedicated to deepening the connection between faith and ecology. The Project’s Interfaith Power and Light campaign is mobilizing a religious response to global warming in congregations through the promotion of renewable energy, energy efficiency, and conservation.
- ✦ www.wcc-coe.org/wcc/what/jpc/earthdocs.html – *World Council of Churches “Justice, Peace and Creation Concerns”* features in-depth, ecumenical resources for people of faith on issues of climate change, clean water, faith/science/technology, economic globalization and ecology, and caring for life.

KEY FACTS

Benefits of Using Renewable Energy and Energy Efficiency¹

Renewable energy sources and technologies include active and passive solar energy, solar thermal, solar photovoltaics, wind power, hydroelectric, and biomass. The benefits of using renewable energy include:

Economic: Renewable energy is our state's only indigenous energy source. Currently, 30¢ of every dollar spent on electricity in North Carolina goes out-of-state for fuel costs. For every dollar spent in-state for renewable energy rather than coal or nuclear fuel, almost \$3 is created by a multiplier effect. Additionally, energy dollars spent in-state for electricity generated by renewable energy and energy efficiency will create high quality, local jobs and businesses.

Energy Diversity and Economic Security: North Carolina's energy portfolio should be expanded. With a majority of our electricity generation currently relying on coal and nuclear, we are at risk for price increases and fuel shortages, both of which are beyond the control of the generating companies. If our energy sources are expanded to include indigenous renewable energy, we would have more energy choices to rely on, making our portfolio more secure, much like an investment portfolio that has a large number of investments. Since most renewable energy is immune to fuel price and supply changes, costs would be much more stable for these resources.

Environmental: Our state's economic and population growth has resulted in more air pollution as utilities burn more coal to meet the demand for more electricity. We can reverse this negative environmental trend by using more renewable energy to meet demand, and by using energy efficiency measures to reduce the amount of new electricity needed. Currently, we rank twelfth in the U.S. in carbon dioxide emissions, releasing more than 125 million tons into the atmosphere each year. Emissions from utility power plants are responsible for one-third of these releases and are the largest single source of greenhouse gas emissions in the state.

Churches and Global Warming²

Prompted by their faith and their commitment to God's creation, churches and individuals are taking the following actions to help reduce their greenhouse gas emissions and to better care for the earth:

Worship Life

- Incorporate creation stewardship as a theme in the preaching, teaching, and community life of the congregation.
- Involve Sunday School classes and youth groups in eco-justice projects, such as weatherizing homes or constructing a compost pile.
- Educate members of the church about the small but important steps they can take to reduce our harmful impact on creation.

Energy Conservation

- Perform an accredited energy use audit on water, electricity, and fossil fuel use.
- Replace incandescent light bulbs with compact fluorescents.
- Install a timer on the hot water heater, so that it will use energy only when needed.
- Install a programmable thermostat for the building, so that it will only use energy when needed during the week.

Alternative Power

- Purchase some power from green sources (see www.ncgreenpower.org).
- Consider alternative power in the church's long range planning efforts.

Water Conservation

- Install aerators on the taps and prevent all leaking and dripping.
- Install low-flow toilets.
- Maximize rooftop runoff for watering the grounds.

Recycling

- Compost kitchen waste.

- Provide containers throughout the building for various types of recyclables.
- Minimize paper use by always printing on both sides and using blank sides of office paper.
- Use 100% post-consumer recycled office paper.
- Use bathroom paper products that are not chlorine bleached and are at least partially post-consumer recycled.

Cleaning Products

- Use at least some cleaning products that are non-toxic.

Landscaping

- Do not use chemical fertilizers or pesticides on the grounds.
- Encourage wildlife with birdhouses, birdfeeders, and/or edible berry bushes.
- Grow only hardy native species of perennials and shrubs.
- Perform grounds maintenance with hand tools, and rake (not blow) leaves.

Transportation

- Install adequate bike racks that are user-friendly.
- Strongly encourage carpooling and the use of alternative transportation.

Outreach and Inreach

- Form a Sustainability or Ecology Committee or Working Group.
- Encourage communication with other local faith groups who may be addressing these issues and participate in local conferences and workshops that promote stewardship and eco-justice.
- Publicize the success of the church's efforts in local news media, and/or in church publications and websites.

1. Adapted from NCSEA's position on Utility Restructuring in NC, <http://www.ncsustainableenergy.org/renewable/restructuring.html>
2. Adapted from the North Carolina Council of Churches' "House of Worship Quiz," www.nccouncilofchurches.org/areasofwork/issues/environmental_justice/house_of_worship_quiz.pdf and the Presbyterian Church (U.S.A.) "Electric Stewardship: Plug Into Conservation" brochure, available at www.pcusa.org/energy.