



**Marianist
Environmental
Education
Center**

Restoring communities of land and people

MEEC is a Marianist environmental education community in the Catholic tradition. In Mary's hope-filled spirit, we preserve and act in communion with the land and educate other communities in sustainability through ecology-based simple living, social justice and spirituality.

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ENERGY FAST

*A Lenten resource for
reflecting on climate justice
and acting to conserve energy*

Marianist Environmental Education Center
Lent 2011

This, rather, is the fasting that I wish: releasing those bound unjustly, untying the thongs of the yoke, setting free the oppressed . . .

Isaiah 58:6 (NAB)

A few years ago, I was invited as a scientist and Marianist sister to Chaminade University in Honolulu to share the predicted impacts of climate change on the Pacific Islands. A student named lumi listened as I described shrinking freshwater supplies and vanishing coastlines. Startled, she interrupted me. "Are you telling me that my culture is going to disappear into the ocean? What are you going to do about it?"

The "you" in her question was everyone responsible for the problem. That is, all of us. I think often of lumi and carry her plea with me as I travel and educate about the real dangers of rising carbon dioxide, the gas primarily responsible for climate change. She's not a graph or a data point—she is a real person, my sister, whose future is far outside her control. I carry lumi with me lest I forget that each of us has an obligation to do our part to care for the integrity of Creation for the sake of our vulnerable and disadvantaged sisters and brothers throughout the world who will be most impacted by the coming changes.

This *Lenten Energy Fast* booklet is a prayer and action journey of solidarity with our brothers and sisters and the entire web of life and the Earth herself that sustains us. I am grateful to MEEC Program Coordinator Tara Poling who compiled this resource. I am also grateful to Bro. John Lemker, SM for his beautiful cover photo honoring the 25th Anniversary of our Mount Saint John prairie, and to Bros. Jack Somerville, SM and Joe Janosik nSM for their help in preparing energy tips.

May we hear the voices of Jesus and lumi companioning and encouraging us to action this Lenten season.

*Leanne M. Jablonski, FMI
MEEC Director
February, 2011*

Become a Friend of MEEC

Friends of MEEC lend their financial support to our mission through annual contributions of \$35 or more for an individual, or \$50 or more for a family. As a Friend, you join us in promoting equitable resource use, restoring native ecosystems, and fostering a sustainable human presence on Earth.

Other benefits include:

- free admission to more than 130 nature centers nationwide that are members of the Association of Nature Center Administrators,
- resource-center privileges, including book, journal and video circulation,
- reduced program fees, and
- invitation to special events for Friends and volunteers.

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Yes! I support MEEC's work to restore communities of land and people. Enclosed is my tax-deductible contribution of \$_____.

- \$35-\$99 \$15 (low income, senior, student) \$50 (family) \$100-\$249 \$250-\$499 \$500+

I am interested in volunteering. Please contact me.

MEEC will not share your contact information.

33 Clean dryer lint traps after every use and change or clean furnace filters monthly.

34 Check the temperature settings on your refrigerator and freezer. Settings should be 36-38 degrees and 0-5 degrees for maximum efficiency.

35 If a replacement car is needed soon, consider purchasing a hybrid. Even better, look for a used hybrid with good battery life remaining.

36 Consider native alternatives to landscape plants in your yard and garden. They require fewer chemical inputs and less water than many ornamental plants.

37 Place lower wattage bulbs in areas such as hallways not used for reading or other light-intensive tasks.

38 When shopping, choose items with the least amount of packaging and avoid resource-intensive convenience packs.

39 As spring approaches consider planting a deciduous tree to shade the south or west side of your home or to shade your air-

conditioning unit to help it run more efficiently. The tree will also remove carbon dioxide from the air as it grows.

40 Check out the EnergyStar.gov website for info on all of the tax credits available for energy-efficiency improvements.

“ ***The Church has a responsibility towards creation, and she considers it her duty to exercise that responsibility in public life, in order to protect earth, water and air as gifts of God the Creator meant for everyone, and above all to save [hu]mankind from the danger of self-destruction.***”

- Pope Benedict XVI, 2010
World Day of Peace Message

Suggestions for using this booklet

The idea of an Energy Fast draws on the tradition of doing without so that our senses will be reminded of what is essential.

- Each week, reflect on the brief readings which include scientific projections of how climate change will impact the peoples of the world, reflections based on scripture texts, and inspiring examples of practical steps others have taken.
- Each week, select one or a few of the **40 Ways in 40 Days** (p. 15) energy-curbing suggestions to try. These are designed to be introductory steps that can make a real difference.
- Take the **St. Francis Pledge** during your Lent journey and continue in Easter (p. 4)

The simple act of being aware of our consumption is also a critical step to moving toward larger, systemic change. We encourage your feedback on this resource and sharing what you're doing. Contact us at mec@udayton.edu.

Scripture passages are from the *New American Bible*. Impact data is from the *Summary for Policymakers* by the UN Intergovernmental Panel on Climate Change (IPCC) Working Group II Fourth Assessment Report, 2007.

The center of biblical right relationships is justice. “The Earth is the Lord’s and all that is in it,” (Ps. 24) reminds us that we are stewards of God’s creation, which “is very good,” (Gen. 1). Jesus taught us to “love your neighbor as yourself” (Mt. 22).

We live in a world in which the burden of environmental problems falls on the most vulnerable members of the human family, and will continue to impact those who have yet to be born. Climate change is perhaps the most significant of the environmental justice problems we face.

Preparing for Easter means doing well what we should be doing all year long. This can involve prayer (justice toward God), fasting (justice toward self) and almsgiving (justice toward neighbor). Climate justice - limiting the impacts of a warming world for those with the fewest resources to adapt and protecting Earth’s resources for the future - is a moral imperative. Fortunately, we can all make a difference by acting sustainably. Our goal is to introduce the moral and social justice aspects of the issue, and to provide some simple steps almost anyone can take to cut their own energy consumption and remember those whose lives look very different from our own.

Week 1: Humility

“ Our very name as humans derives from the root shared with humus, the top layer of soil. Our bodies are made up of the earth; the vitamins and minerals that plants took up from the soil along with the carbon that plants took from the air. Our Ash Wednesday rituals remind us that we are of the earth, and to this dust we shall return. Humility invites us to recognize that humans are part of, not apart from, the web of life. What happens to the rest of the ecosystem impacts us and what we put into our air, soil, water and earth becomes part of us. The field of ecology, which is the study of the

relationship between organisms and their environment, expresses this intrinsic connection between all parts of our surroundings. Derived from “oikos” meaning house, ecology shares meaning with the dynamics of our Christian communities having the same root as the house churches in the Acts of the Apostles. We are invited to see our entire natural environment as part of our communities.”

– *Leanne Jablonski, FMI, Ph.D., director of MEEC, “Humbly Changing our Lives in Response to Climate Change,” National Catholic Rural Life, Spring 2005.*

The Catholic Climate Covenant: The St. Francis Pledge to Protect Creation and the Poor helps individuals discern these connections. This initiative calls individuals, groups and institutions to make a serious commitment to **PRAY** and reflect on the duty to care for God’s creation and protect the poor and vulnerable; **LEARN** about and educate others on the moral dimensions of climate change; **ASSESS** our

participation—as individuals and organizations— in contributing to climate change (i.e. consumption and conservation); **ACT** to change our choices and behaviors contributing to climate change and; **ADVOCATE** Catholic principles and priorities in climate change discussions and decisions, especially as they impact the poor and vulnerable. Learn more, be inspired by others taking action and take the pledge at catholicsandclimatechange.org

19 Make sure furniture or drapes do not block heating vents or air returns.

20 Keep fireplace dampers closed when the fireplace is not in use. Chimneys will exhaust warm air as well as smoke.

21 Rinse clothes in cold instead of hot or warm water. Standard washing machines use 32-59 gallons of water per cycle, which requires significant energy to heat.

22 Institute a TV-free night, and plan less energy-intensive activities with friends and family. That means no driving!

23 Do not run exhaust fans excessively during the heating or cooling seasons, as this moves conditioned air outside.

24 Allow dishes to air dry, even in the dishwasher.

25 Install a low-flow showerhead in your bathroom. This will not only save water, but the substantial energy needed to heat it.

26 Consider fasting from meat at least one meal each week even after Lent.

Vegetable- and grain-based protein requires far less energy than animal protein to produce.

27 Think seriously about big electricity consumers. Do you really need a second fridge? Do the security lights that come on every night use efficient technology, like CFLs or LEDs? Are computers being left on for long periods when not in use?

28 Install storm doors at each entrance and exit to your home.

29 Clean the condenser coils underneath or behind your refrigerator regularly to help it run more efficiently.

30 Calculate the carbon emissions of your travels at travelmatters.org.

31 Insulate your duct work that passes through unconditioned spaces with insulating wrap available at home stores.

32 Screen savers do not save energy. Turn your monitor off when you are away from your computer. Ensure the computer is shut off when not in use for an extended period or overnight.

6 Use a lit incense stick or candle to locate air leaks around windows and doors, and seal them with caulk or weather stripping. Sealing older windows with plastic film kits will also substantially reduce winter heat loss. These are available in most hardware stores.

7 If you have an older gas water heater or any electric water heater, consider replacing with a tankless or condensing high-efficiency gas water heater. These units use energy more efficiently, cost less to operate, and have practically no standby losses.

8 Many electronic devices continue to draw power even when they are “off,” including anything with a clock, a remote control, or a “wall wart” plug. In the average US home, 75% of the electricity used to power these devices is consumed when they are not in use. Unplug these devices, or use a power-strip to cut supply to an array of devices.

9 Keep your car tires properly inflated for better gas mileage.

10 Reusable cloth shopping bags

eliminate waste and the energy required to produce plastic bags.

11 Wrapping your hot water lines with pipe insulation will prevent much heat loss as water travels from heater to faucet.

12 Use natural light from windows whenever possible.

13 Don’t speed. Every 10 mph in speed reduces fuel efficiency by 4%.

14 Avoid using the rinse/hold setting on your dishwasher whenever possible.

15 Install a programmable thermostat that will reduce heating or cooling during the hours you are away from home or are asleep.

16 Dust light fixtures regularly. Clean bulbs and reflectors have greater light efficiency.

17 If you’re in the market for a new appliance, make sure it carries an Energy Star label. Visit EnergyStar.gov for info.

18 Make sure your attic is well-insulated to prevent heat loss.

Impact: Africa

Africa is one of the most vulnerable continents to climate change because of multiple stresses and low adaptive capacity. According to the IPCC, Africa is expected to experience the following climate impacts, which will exacerbate existing challenges of hunger, drought and access to clean water:

- Agricultural production, including access to food, in many African countries and regions is projected to be severely compromised.
- By 2020, between 75 million and 250 million people may be exposed to water stress.
- Low-level coastal communities will be affected by sea-level rise towards the end of this century. The cost of adaptation could amount to 5-10% of GDP.

Prayer & Reflection

The first reading for the first Sunday of Lent (Gen.2:7-3:7), takes place in the garden of Eden, in which God places Adam “to cultivate and care for it.” The Gospel reading (Mt. 4:1-11) deals with Jesus’ temptation in the desert and his triumph over power, greed and conceit.

How, in my daily life, do I remember the instruction to care for the Earth? What do I appreciate about this “garden” in which I’ve been placed?

How am I tempted by the consumer culture? How can I transform the power I have as a first world citizen for the common good?

Use the space below for your reflections, or to record which of the “40 Ways in 40 Days” you commit to implement this week.

Week 2: The common good

“ Global climate is by its very nature a part of the planetary commons.

The Earth’s atmosphere encompasses all people, creatures, and habitats. The melting of ice sheets and glaciers, the destruction of rain forests, and the pollution of water in one place can have environmental impacts elsewhere. As Pope John Paul II said, “We cannot interfere in one area of the ecosystem

without paying due attention to both the consequences of such interference in other areas and to the well being of future generations.” Responses to global climate change should reflect our interdependence and common responsibility for the future of our planet.”

– US Bishops, *Global Climate Change: A plea for dialogue, prudence & the common good*, 2001

Impact: Asia

According to the IPCC, Asia is expected to experience the following:

- Freshwater availability in Central, South, East and South-East Asia is projected to decrease.
- Glacier melt in the Himalayas is projected to increase flooding and rock avalanches, and to affect water resources within the next two or three decades.
- Deaths from diseases associated with floods and droughts are expected to increase in the East, South, and South-East.

“ **To be sure, among the basic problems which the international community has to address is that of energy resources and the development of joint and sustainable strategies to satisfy the energy needs of the present and future generations. This means that technologically advanced societies must be prepared to encourage more sober lifestyles, while reducing their energy consumption and improving its efficiency.**” Pope Benedict XVI, 2010 World Day of Peace Message

40 Ways in 40 Days

“ Lent is the season of fasting, a time for restraint, sacrifice, giving up for others, recognition of wrongdoing, repentance and confession. ... Are we wasteful personally - in eating too much, giving in to excessive fashion, overheating our homes, overusing electricity, needlessly traveling and driving our cars, not recycling, or using products that create unnecessary chemical and toxic waste?”

- USCCB, *Faithful Stewards of God’s Creation: A Catholic Resource For Environmental Justice & Climate*

“ It is becoming more and more evident that the issue of environmental degradation challenges us to examine our life-style and the prevailing models of consumption and production, which are often unsustainable from a social, environmental and even economic point of view. We can no longer do without a real change of outlook which will result in *new life-styles*, “in which the quest for truth, beauty, goodness and communion with others for the sake of common growth are the factors which determine consumer choices, savings and investments.”

-Pope Benedict XVI, 2010 World Day of Peace Message.

1 Replace older incandescent light bulbs with energy saving compact fluorescents (CFLs). CFLs use significantly less power and are available in a variety of colors—from bright white to warm yellow. Special CFLs work in dimmable and outdoor fixtures.

2 Keep track of your vehicle usage during the next week. Using this data, plan ways to reduce and combine trips. This saves time, money, and the environment.

3 Question consumption. Share or borrow instead of purchasing. Buy used instead of new when you can. All these help save the energy and resources that new products would require.

4 Lowering your water heater temperature setting from 140°F to 120°F can reduce energy demand by more than 10 percent. 120°F is hot enough to kill bacteria and is hot enough for most household needs.

5 Check your thermostat—each degree above 68°F adds 3% to your home heating energy needs.

After Easter

The Easter season is rich with symbols of new life. Like Jesus' followers at the resurrection, our journey of building a faith community that reaches out to meet the needs of the poor through acts of justice begins anew at Easter. The experiences of the early communities detailed in the Acts of the Apostles remind us to find support from like-minded people of faith.

MEEC is dedicated to building communities of people that live simply and sustainably on Earth. In the Dayton area, we train congregational liaisons to educate and motivate local church communities and are forming volunteer communities that work with staff to achieve our mission. As a Marianist ministry (marianist.com) we work in collaboration with the Marianist Social Justice Collaborative www.msjc.net throughout North America and globally. We invite your participation.

The following suggestions and resources will also help you further your own education and network with like-minded individuals. If you have found this guide helpful, or if you have suggestions for improvement, we would love to hear from you.

- Take it to your church. Get a copy of the *God's Creation Cries for Justice*, an 8-week Just Matters module for parishes, including a DVD of Sr. Leanne. Visit catholicsandclimatechange.org
- Form a green team in your local Church or community. Read *7 Simple Steps to Green Your Church* by Rebekah Simon-Peter, 2010, Abingdon Press. Interfaith resources are available at nrpe.org.
- Eat locally in season. Visit foodroutes.com to find a farm market or Community Supported Agriculture (CSA) in your zip code.
- Learn the science of climate change at greenfacts.org. This site features a user-friendly presentation of the Intergovernmental Panel on Climate Change's reports. Also, visit The Union of Concerned Scientists at ucsusa.org.
- Consider donating the money you're now saving on your energy bill to an organization such as the Catholic Campaign for Human Development, or Caritas International. Donations to MEEC support further resource development and education outreach.

GOOD STEWARDS

In 2006, the Mount St. John Green Team in Dayton began educating employees and visitors about the environmental and financial costs of incandescent bulbs, and encouraged transition to compact fluorescents (CFLs). CFLs require far less energy to operate and last much longer. The staffs of Mount St. John Facilities and the Bergamo Center also started transitioning to more energy efficient bulbs and fixtures. As a result, energy use on the property has decreased by nearly 11%. This saved 117 tons of carbon dioxide—a greenhouse gas—and more than \$9,500 in 2010.

Prayer & Reflection

In the Genesis reading for the second Sunday of Lent (12:1-4), God calls Abram away from his land and his tribe, telling him he would be a blessing to all the communities of the Earth. The Gospel reading (Mt. 17:1-9) is the story of the transfiguration, in which the disciples hear clearly the voice of God identifying Jesus.

How does Lent challenge me to give up comfortable habits and develop new ways of being in solidarity; ways that are more attentive to the needs of the Earth and my neighbors, wherever they may be?

How can I, like Abram, be a blessing to others? How can I be alert to the voice of God in my life?

Use the space below for your reflections, or to record which of the "40 Ways in 40 Days" you commit to implement this week.

Week 3: Voice of the poor

“ Inuit face many challenges in finding our place in the new world order of globalization. A place that affords us self-respect and security, and in which we also contribute to the well-being of others. Notwithstanding our struggles and our limited numbers, we Inuit do have a significant role to play globally. Especially now with the threat of climate change to our entire way of life, we need to capture the world’s attention and conscience.

Climate change is happening first and fastest in the Arctic. My homeland—the Arctic—is the health barometer for the planet. By looking at what is already happening in remote Inuit villages in Alaska, such as Shismaref and Kivalina, you can understand the future

dangers for more populated areas of the world such as Florida, Louisiana or California. Shismaref is literally being battered to the point of falling into the sea.

If we can reverse the emission of climate change inducing greenhouse gases in time to save the Arctic from the most devastating impact of global warming, then we can spare untold suffering for hundreds of millions of people around the globe. Protect the Arctic and we Save the Planet. Use us in the Arctic as your early warning system.”

- *Testimony of Sheila Watt-Cloutier, Chair, Inuit Circumpolar Conference Senate Committee on Commerce, Science and Transportation, 2004*

Moses was a participant in alleviating the thirst of his people. How am I called to participate in giving water to the thirsty?

How can I be more attentive to the suffering of those outside my immediate family? Community? Country?

Prayer & Reflection

In the Hebrew scripture reading for the third Sunday of Lent (Ex. 17:3-7), Moses leads his people into the desert, where they thirsted. Moses followed God’s command to strike a rock with his staff, and water poured forth. In the Gospel (John 4:5-42) Jesus offers the Samaritan woman, a foreigner, living water.

Prayer & Reflection

In the reading from the Hebrew Scripture for the fifth Sunday of Lent (Ez. 37:12-14), the prophet leads us to the valley of dry bones, reminding us of the Ash Wednesday lesson—we are ashes. The story is a powerful reminder that God can do wondrous things with our lives if we ask. In the Gospel (John 11:1-45) Jesus return to Judea to the house of Lazarus, against the judgment of the disciples, who believe he will be killed.

What difficult choices is God calling me to make to minister to those in greatest need?

How does my faith in the coming new life help me overcome that which gets in the way of God’s action in my life?

How can I rely on the community in which I am part to act with concern for the poor and vulnerable? What actions could we take together? See ideas at interfaithpowerandlight.org.

Use the space for your reflections, or to record which of the “40 Ways in 40 Days” you commit to implement this week.

Holy Week

Over the past five weeks of Lent, you have journeyed with Jesus the healer and teacher in your prayer and fasting to conserve energy. Holy Week invites us to deepen the journey in companionship with Jesus who set his face to Jerusalem, knowing that faithfulness to priestly service, transformative leadership and prophetic truth would be difficult. At the foot of the cross, Jesus gives the disciple John and Mary, and in turn each of us, to each other as family so we do not journey alone.

During Holy Week, be aware of what stirred most in you this Lent, reflect on how Jesus calls his community to self-giving love, and pray for the grace to be open to the new life God works in us.

Week 5: Prudence

“ In facing climate change, what we already know requires a response; it cannot be easily dismissed. Significant levels of scientific consensus – even in a situation with less than full certainty, where the consequences of not acting are serious – justifies, indeed can obligate, our taking action intended to avert potential dangers. In other words, if enough evidence indicates that the present course of action could jeopardize humankind’s well-being, prudence dictates taking mitigating or preventative action.

This responsibility weighs more heavily upon those with the

power to act because the threats are often greatest for those who lack similar power, namely, vulnerable poor populations, as well as future generations. According to reports of the IPCC, significant delays in addressing climate change may compound the problem and make future remedies more difficult, painful, and costly. On the other hand, the impact of prudent actions today can potentially improve the situation over time, avoiding more sweeping action in the future.”

– US Bishops, *Global Climate Change: A plea for dialogue, prudence & the common good*, 2001

Impact: North America

According to the IPCC, North America is expected to experience the following climate impacts:

- Warming in western mountains is projected to cause decreased snowpack, more winter flooding, and reduced summer flows, exacerbating competition for water.
- Disturbances from pests, diseases and fire are projected to have impact forests, with an extended period of high fire risk and large increases in areas burned.
- Cities that currently experience heat waves are expected to be further challenged by an increased number, intensity and duration of heat waves during the course of the century, with potential for adverse health impacts. The elderly are most at risk.

Impact: Polar Regions & Small Islands

According to the IPCC, “Arctic human communities are already adapting to climate change, but both external and internal stressors challenge their adaptive capacities. Despite the resilience shown historically by arctic communities, some traditional ways of life are being threatened and substantial investments are needed to adapt or re-locate physical structures and communities.”

Small islands are also especially vulnerable to the effects of climate change, sea-level rise and extreme events. They are expected to experience the following:

- Coastal deterioration is expected to affect local resources, e.g., fisheries, and reduce the value of these destinations for tourism.
- Climate change is projected by mid-century to reduce water resources in many small islands, e.g., in the Caribbean and Pacific, to the point where they become insufficient to meet demand during low-rainfall periods.
- Sea-level rise is expected to exacerbate inundation, storm surge, erosion and other coastal hazards, thus threatening vital infrastructure, settlements and facilities that support islanders’ livelihoods.

Use this space for your reflections, or to record which of the “40 Ways in 40 Days” you commit to implement this week.

Week 4: Our future family

“ Working for the common good requires us to promote the flourishing of all human life and all of God’s creation. In a special way, the common good requires solidarity with the poor who are often without the resources to face many problems, including the potential impacts of climate change. Our obligations to the one human family stretch across space and time. They tie us to the poor in our midst and

across the globe, as well as to future generations. The commandment to love our neighbor invites us to consider the poor and marginalized of other nations as true brothers and sisters who share with us the one table of life intended by God for the enjoyment of all.”

– US Bishops, *Global Climate Change: A plea for dialogue, prudence & the common good*, 2001

GOOD STEWARDS

In February 2010 The Marianist Family Retreat Center in Cape May Point, New Jersey, completed the installation of 95 solar panels (a 19 kilowatt system) capable of producing 22,211 kilowatt hours of renewable electricity for use by the Center. This represents about a third of the Center’s electric consumption. The total cost of the project was \$119,000 and with a \$19,000 rebate from the State of New Jersey as well as other state incentives, this project will

pay for itself in under 7 years returning 15% annually on our investment. So not only is this project a plus for the environment, it is a great financial investment—especially given the current economy.

The reaction to this project has been nothing but positive. After speaking of this project to two local Cape May families both decided to move ahead with their own installations.

*Anthony Fucci, director,
Marianist Family
Retreat Center*

Impact: Latin America

According to the IPCC, Latin America is expected to experience the following climate impacts:

- There is a risk of significant biodiversity loss through species extinction in many tropical areas.
- Productivity of some important crops is projected to decrease and livestock productivity to decline, with adverse consequences for food security.
- Changes in precipitation patterns and the disappearance of glaciers are projected to significantly affect water availability for human consumption,

Prayer & Reflection

In the Hebrew scripture reading for the fourth Sunday of Lent (1 Sam 16:1-13), Samuel is sent to anoint God’s chosen king from among Jesse’s sons. Jesse does not initially present David—whom God has chosen—to Samuel. In the Gospel reading for the fourth Sunday of Lent (John 9:1-41), Jesus heals the man who had been blind from birth. His community believed his blindness was punishment for the sins of his parents. Because Jesus healed the man on the Sabbath, the Pharisees, in their blindness, were angered and disbelieving.

What helps me overcome my own biases in doing God’s will?

How do I demonstrate the compassion of Jesus as healer, even when it breaks cultural norms to do so?

Use the space below for your reflections, or to record which of the “40 Ways in 40 Days” you commit to implement this week.