

God's work. Our hands.

"Human behavior may change through economic incentive, guilt about the past, or fear about the future. But as people of biblical faith. who live together in trust and hope, our primary motivation is the call to be God's caregivers and to do justice. We celebrate the vision of hope and justice for creation, and dedicate ourselves anew. We will act out of the conviction that, as the Holy Spirit renews our minds and hearts, we also must reform our habits and social structures."

-ELCA social statement. Caring for Creation: Vision, Hope and Justice

Globally there is an overwhelming recognition that the earth's climate is changing. The Trump administration's 2018 U.S. National Climate Assessment (NCA) noted this unequivocally in considering climate impacts on various geographical areas in the United States. The Biden administration has made climate change one of its top priorities and elevates it to a national security issue. In 2018 the Intergovernmental Panel on Climate Change (IPCC) issued its report "Global Warming of 1.5 Degrees C." The report expressed the urgency of taking rapid action over the next decade to limit global warming to 1.5 degrees Centigrade to avoid the risks associated with long-lasting or irreversible climate change. The IPCC concludes that limiting global warming to 1.5 degrees Centigrade requires "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities." The report also states that "limiting warming to 1.5 degrees Centigrade is possible within the laws of chemistry and physics, but doing so would require unprecedented changes."

In call, in study and in action, the ELCA looks clearly at this moment. "In our ministry, we learn about the extent of the environmental crisis, its complexities, and the suffering it entails," reads the ELCA social statement Caring for Creation: Vision, Hope, and Justice. "Meeting the needs of today's generations for food, clothing, and shelter requires a sound environment. Action to counter degradation, especially within this decade, is essential to the future of our children and our children's children. Time is very short."

By addressing the root causes of climate change and building resilience and sustainability in all sectors, we can provide a foundational basis for a just transition to a livable future. This resource explores the idea of just transition and specifies action steps we can take.

JUST TRANSITION FOUNDATIONS

NO ONE LEFT BEHIND

"Just transition" is the transition to a net-zero carbon sustainable, resilient world without leaving stranded individuals or communities.

Just transition implies sustainability. "We recognize the obstacles to sustainability," states Caring for Creation. "Neither economic growth that ignores environmental cost nor conservation of nature that ignores human cost is sustainable. Both will result in injustice and, eventually, environmental

degradation. We know that a healthy economy can exist only within a healthy environment."

Just-transition decisions capture each geographic area's uniqueness, recognizing the interconnectedness of all creation and all environmental, social and economic systems. Failure to protect God's creation leads to problems that intensify social injustice. The marginalized and vulnerable are most affected by the ill effects of environmental degradation. By contrast, a just transition attends to racial and gender justice. No one is left behind.

CLIMATE CHANGE SCIENCE

Scientific study of climate change supports the need for a just transition.

Human activity directly links to the significant increase in greenhouse gas emissions (GHGs) since the Industrial Revolution. GHGs act as a blanket around the earth, trapping heat radiation from the sun and increasing surface temperatures. GHGs alter climate by scattering and absorbing solar and infrared radiation. They may change the microphysical and chemical properties of clouds.

Additionally, deforestation and other changes in land use have altered the amount of sunlight reflected back into space. The world's rising surface

temperature increases water evaporation and causes more droughts. As more moisture evaporates, it fuels more powerful storms. More heat in the atmosphere and warmer ocean surfaces can accelerate wind speeds in tropical storms. GHGs also have a significant impact on weather patterns, according to the U.S. Geological Survey of the U.S. Department of the Interior.

More than anecdotal evidence, scientific data indicates that our planet is indeed heating up:

- The year 2020 tied with 2016 as the hottest on record, a clear sign of a planet in distress, as <u>reported</u> <u>by National Geographic</u>.
- Also in that article: the earth's average temperature in 2020 was 2.25 degrees Fahrenheit higher than
 in the late 1800s, according to a comprehensive European analysis. Estimates from the National
 Aeronautics and Space Administration (NASA), National Oceanic and Atmospheric Administration
 (NOAA) and the U.K. Meteorological Office ("Met Office") say the temperature rise may be as high as
 1.29 degrees Centigrade (2.32 degrees Fahrenheit).
- On Jan. 8, 2021, <u>NOAA</u>'s National Centers for Environmental Information (NCEI) issued their final update for 2020, finding it to be a year of historic extremes. There were 22 separate billion-dollar weather and climate disasters across the United States, shattering the previous annual record of 16 events in 2011 and again in 2017.
- Another indicator of climate warming, <u>reports National Geographic</u>, is the reduction of arctic sea ice, which may vanish altogether by 2035.

"Creation must be given voice, present generations and those to come. We must listen to the people who fish the sea, harvest the forest, till the soil, and mine the earth, as well as to those who advance the conservation, protection, and preservation of the environment. ... We pray, therefore, that our church may be a place where differing groups can be brought together, tough issues considered, and a common good pursued," states Caring for Creation.

The fourth <u>National Climate Assessment</u> (NCA) directly connects human activity to climate change. The report highlights the social-relational and economic impacts of a warming climate today and the consequences of inaction for:

- **Economic growth** The report anticipates that varied losses correlated to climate change will impede economic growth over this century.
- Community Rising temperatures, rising sea levels and extreme weather events increasingly disrupt and damage critical infrastructure and property, depressing labor productivity and our communities' vitality.
- Trade and economy The impacts of climate change beyond our borders are expected to increasingly affect our trade and economy, including import and export prices and operation of U.S. businesses with overseas operations and supply chains. Some aspects of our economy may see slight near-term improvements in a modestly warmer world. However, the continued warming that is projected to occur without substantial and sustained reductions in GHGs is anticipated to cause significant net damage to the U.S. economy throughout this century, especially in the absence of increased adaptation efforts.
 - **Human health** As the climate continues to change, risks to human health continue to grow. Shifts in seasonal patterns, regional trends and the quality of our air and water all affect human health, causing injury, illness and death. Transmission of infectious diseases through food, water and disease-carrying vectors such as mosquitoes and ticks can intensify.
- **Indigenous peoples** Indigenous communities' livelihoods, economies, health and cultural identities are likely to be disrupted due to interconnected social, physical and ecological systems.

PROGRESSING TOWARD JUST TRANSITION

Different sectors are progressing toward just transition, but much work is needed. Listed below are some examples of the beginning of a just transition.

ENERGY

We need to adjust our energy production and use to support a sustainable, resilient world. New technologies and approaches are emerging in the energy sector.

 Renewables — <u>Analysis</u> from the International Energy Agency (IEA) indicates that renewables will likely lead the global electricity sector.

"Wisdom, God's way of governing creation, is discerned in every culture and era in various ways," states Caring for Creation. "In our time, science and technology can help us to discover how to live according to God's creative wisdom. Such caring, serving, keeping, loving, and living by wisdom sum up what is meant by acting as God's stewards of the earth."

Total installed wind and solar photovoltaic (PV) capacity are on course to surpass natural gas in 2023



Scene from the ELCA Upper New York Synod

and coal in 2024. Renewables will overtake coal to become the largest source of electricity generation worldwide in 2025. Major oil and gas companies' investments in new renewable electricity capacity will increase tenfold from 2020 to 2025. Coal could be eliminated from the U.S. power sector by 2033 as the costs of renewables fall, the investment firm Morgan Stanley reported. Other reports, including from the IEA, show coal use diminishing but still continuing through 2050.

• **Hydrogen** — The world is likely to see different sectors partnering to advance technology and renewables as in the Hydrogen Forward coalition — whose members include Shell, hydrogen gas

supplier Air Liquide, fertilizer manufacturer CF Industries and mining giant Anglo American. The coalition plans to educate lawmakers in Washington, D.C., about the environmental benefits of hydrogen and to encourage accelerate hydrogen production policies to and infrastructure development. It is worth noting that the United States is behind on the world stage here. Compared with some European and Asian countries, the United States lacks "systemic policy support" for hydrogen. Last year, several countries announced strategies or investments to bolster low-carbon hydrogen as a climate-friendly energy source and a way to boost economic activity during the COVID-19 pandemic.



Scene from the ELCA Montana Synod

• **Tension** — As with any change, switching to low carbon is not without controversy. As a <u>World Bank</u> <u>blogger</u> put it, "We can and must, now and simultaneously, handle the short-term crisis, foster sound development and economic growth in the medium term, and protect the planet from devastating climate change in the long term." <u>ExxonMobil Low Carbon Solutions</u> is advancing plans for more than 20 new carbon capture and storage opportunities around the world to enable large-scale emission reductions. ExxonMobil plans to invest \$3 billion on lower emission energy solutions through 2025. The projects include carbon capture sequestration (CCS) and hydrogen production. CCS has become a subject of particular concern to many in <u>civil society</u>.

AGRICULTURE

The agricultural sector is already adapting to the impacts of climate change. Agriculture and forestry account for about 25% of the world's GHGs, making them double-edged challenges. World food production must increase to feed the world's evergrowing population, which is projected to reach 9.8 billion people by 2050 and 11.2 billion by 2100. At the same time, GHGs must be reduced to net zero.

 Vertical farming — Economies looking to increase their food production and simultaneously reduce water usage are exploring vertical farming, an attractive option for arid regions.



Food pantry garden in the ELCA Alaska Synod

• **Probiotic production** — Companies such as Archer-Daniels-Midland Company work to fund projects that combine carbon dioxide, oxygen and nitrogen with water and minerals in a probiotic production process, and to convert these elements into nutrients (air protein).

CONSTRUCTION AND BUILDING

Sustainable industry practices will contribute to a just transition for our economy and communities. As the construction industry moves further toward erecting energy-efficient buildings and retrofitting current structures, there will be new jobs and a retooling of skills.

• Jobs and structures — For example, the <u>Just Transition</u> <u>Centre</u>, reporting to the Organisation for Economic Cooperation and Development (OECD) in May 2017, found

that stronger energy-efficiency standards in the European Union (particularly in Belgium) have driven an increase in



Scene from an ELCA World Hunger project in China

jobs retrofitting buildings and building new structures with a higher standard of energy efficiency.

FURTHERING ACTION

The <u>Paris Agreement</u>, which the United States rejoined on February 19, 2021, says in part: "Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality,



Post-storm scene from the ELCA Caribbean Synod

empowerment of women and intergenerational equity." From our faith foundations, Lutheran advocates also hold these priorities. We can use our voices to advance policies reflecting our common concerns.

On Jan. 27, 2021, President Biden issued two executive orders ("Executive Order on Tackling the Climate Crisis at Home and Abroad" and "Executive Order on the President's Council of Advisors on Science and Technology") and a presidential memorandum ("Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-based Policymaking") that detail his plan for putting the country on a path to net-zero carbon emissions by 2050. These actions

addressing the climate crisis also seek to implement measures that ensure a holistic approach to address current and historical environmental injustices. President Biden's administrative actions are procedural in nature yet lay a foundation for a just transition. Every federal agency is responsible for implementing the orders. As they are implemented, advocates must monitor them to guarantee that they include all, and before public policy change, advocates must insist that impacted stakeholders be consulted.

Advocacy begins by turning to God in prayer and asking for direction of our thoughts and actions. Listed below are some action ideas.

- Advocate for climate action policies that expeditiously **reach a carbon-neutral society** in a manner that eradicates poverty and provides for resilient, economically viable communities.
- Lead in **reconnecting people with the wonders** of nature and creation, nurturing love for the planet and fostering compassion and reconciliation.
- Intentionally **engage with the world's youth** and with youth-led movements to mobilize and act on a larger scale.
- Adjust education systems to help students understand, address and adapt to global warming.
- Identify means and mechanisms for faith-based organizations to leverage their callings, experiences, in-country relationships and accompaniment with Indigenous peoples, communities in general, NGOs and governments to influence and advance climate change solutions.
- Devise methods for faith-based communities to **engage with other religious leaders** to spur discussion on climate change in their congregations, in society and among policymakers.
- Connect climate resilience to both personal and communal health. Galvanize people to **identify holistic resiliency assets**, both individual (coping and self-regulating mechanisms) and community-level (support networks), maximizing their strength and leveraging their potential while also incorporating mitigation and adaptation measures that include the social, mental and physical needs of all.
- Advocate for **strong climate finance** to address "loss and damage" (climate impacts exceeding the adaptive capacity of countries, communities or ecosystems) and to support innovative solutions by encouraging investment in research and development.
- Advocate for well-financed disaster recovery programs ensuring that post-disaster resources reach everyone impacted — especially those with lower incomes.
- Develop tools to strengthen the resilience and adaptive capacity of food systems. Continue to affirm effective initiatives that do not deplete the earth but sustain us all and seek new ways to reduce the injustices of hunger and poverty.

"Given the power of sin and evil in this world, as well as the complexity of environmental problems, we know we can find no 'quick fix' – whether technological, economic, or spiritual," states Care for Creation. "A sustainable environment requires a sustained effort from everyone. The prospect of doing too little too late leads many people to despair. But as people of faith, captives of hope, and vehicles of God's promise, we face the crisis."

- Develop means to mobilize **early-warning systems before disaster strikes**, in addition to disaster response planning.
- Advocate for **ocean health** through public policy.
- Lead communities by example as congregations promote sustainable practices, which include growing food locally and using energy and water efficiently. Incorporate locally informed, innovative advocacy initiatives toward just transition.

Knowing that climate change impacts marginalized and vulnerable people the most, we must commit to actions that leave no one behind. In our efforts to protect God's good creation, we will not exclude voices, because doing so would only mirror and deepen existing racial, gender and economic inequalities. *Caring for Creation* yokes our stewardship and interconnectedness: "Such caring, serving, keeping, loving, and living by wisdom sum up what is meant by acting as God's stewards of the earth. God's gift of responsibility for the earth dignifies humanity without debasing the rest of creation. We depend upon God, who places us in a web of life with one another and with all creation."

Advocates from across the ELCA, supported by the ELCA Witnessing in Society team, will use their voices and act toward a just transition for our common home.

QUESTIONS FOR DISCUSSION

- Had you heard of "just transition" before? In your opinion, how is it related to and/or different from other climate crisis responses?
- We live in a time of widespread misinformation. How does scientific information impact your perception of the state of the earth? Of options for caring for our environment?
- Drawing upon your own work/location/personal experience, what aspect of climate awareness do you wish others knew about?
- What voices do you think may be "left behind" as we move into a just transition? What can you do about it?
- How can your congregation lead your community in just transition efforts?

The study guide "<u>Caring for Creation Now! For the Healing of the World</u>," prepared to accompany the aforementioned ELCA social statement, provides additional study options.

Want to share reflections from these discussion questions? Forward to washingtonoffice@ELCA.org.

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