

Evangelical Lutheran Church in America  
God's work. Our hands.

*This moment in time:*

## 2018 IPCC REPORT AND CARING FOR CREATION

*A resource reflecting on content of a 2018 report released by the U.N. Intergovernmental Panel on Climate Change, faith-based reflections from the ELCA, and ways to respond*

This is likely one of the most challenging times that we have ever faced as a global community. Our lives and future generations depend on actions we take or do not take in response to our changing climate.

The Intergovernmental Panel on Climate Change (IPCC), which is the United Nations (U.N.) body for assessing the science related to climate change response, issued its 2018 report titled "Global Warming of 1.5°C."<sup>1</sup> The report expressed the urgency of taking rapid action over the next decade to limit global warming to 1.5°C to avoid the risks associated with long-lasting or irreversible changes.

The state of our environment in 2018 matches the description of the 1993 ELCA social statement titled "Caring for Creation: Vision, Hope and Justice."

**"The earth is a planet of beauty and abundance; the earth system is wonderfully intricate and incredibly complex. But today living creatures, and the air, soil, and water that support them, face unprecedented threats. Many threats are global; most stem directly from human activity. Our current practices may so alter the living world that it will be unable to sustain life in the manner we know."** <sup>2</sup>

The release of greenhouse gas (GHG) emissions, primarily due to human activity,<sup>3</sup> is causing global warming. As a result, the earth is experiencing more frequent severe and intensified weather patterns and temperature extremes. These extreme weather patterns are resulting in floods, droughts, wildfires and rising sea levels that are leading to the degradation of the earth. All of this is negatively impacting earth's inhabitants at unprecedented rates. Globally we are seeing forced migration, exacerbation of poverty, national security concerns, negative impacts on agriculture resulting in food insecurity and threats to ecosystems that could lead to the extinction of some species.

The deterioration of our environment impacts the entire world, but it disproportionately affects the most vulnerable who have contributed the least and are ill-equipped to implement the remedies needed to create resilient communities and societies.

As the church of Christ, we must move beyond rhetoric or good intentions to embody our responsibility as stewards of God's creation through climate action and advocacy. We are responsible for the well-being of our neighbor and are called to exercise this care in a manner that is just and inclusive of people of all ethnicities, genders, geographies and ages.

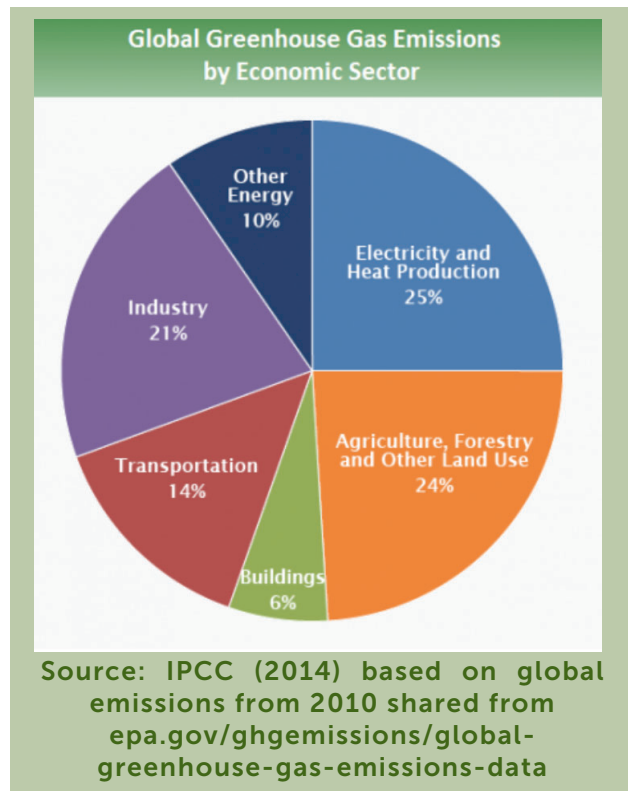
Our call is to protect and sustain the good earth, our home which God created. Limiting warming to 1.5°C is possible within the laws of chemistry and physics, but doing so requires unprecedented changes.<sup>4</sup> The IPCC report makes this very clear. We must reduce emissions and/or remove carbon dioxide from the atmosphere. We must address GHG emissions from all sectors. The IPCC report is a startling wake-up call.

## **BACKGROUND**

In 2015 the United Nations Framework Convention on Climate Change’s (UNFCCC) Conference of the Parties in its 21st session (COP 21) recognized the urgency and complexity of addressing climate change and codified this in the Paris Agreement, adopted through Decision 1/CP.21. The decision’s preamble states: “Climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions.”<sup>5</sup> The Paris Agreement states: “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, empowerment of women and intergenerational equity.”<sup>6</sup>

In the decision, an invitation was issued to the IPCC to provide a special report in 2018 on the impacts of global warming of 1.5°C above preindustrial levels and related global GHG emission pathways.<sup>7</sup> The IPCC issued this special report, *Global Warming of 1.5°C*, in October 2018.

The report is a culmination of more than 6,000 scientific references cited; 91 authors from 44 citizenships and 40 countries of residence plus 133 contributing authors; and a total of 42,001 experts. The reports states: “Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems. These system transitions are unprecedented in terms of scale, but not necessarily in terms of speed, and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investments in those options.” All sectors must be addressed.



## **HIGHLIGHTS OF THE REPORT<sup>8</sup>**

### **Current status of climate change**

- Human-induced warming has already reached about 1°C above preindustrial levels at the time this special report was written. If the current warming rate continues, the world would reach human-induced global warming of 1.5°C around 2040.
- Limiting global warming to 1.5°C above preindustrial levels would require major reductions in greenhouse gas emissions in all sectors. But different sectors are not independent of each other, and making changes in one can have implications for another.

- The impacts of climate change are being felt in every inhabited continent and in the oceans. However, they are not spread uniformly across the globe, and different parts of the world experience impacts differently. An average warming of 1.5°C across the whole globe raises the risk of heat waves and heavy rainfall events, among many other potential impacts.
- In order to limit warming to 1.5°C above preindustrial levels, the world would need to transform in a number of complex and connected ways. While transitions toward lower greenhouse gas emissions are underway in some cities, regions, countries, businesses and communities, there are few that are currently consistent with limiting warming to 1.5°C. Meeting this challenge would require a rapid escalation in the current scale and pace of change, particularly in the coming decades.

### **Reducing GHGs**

- Carbon dioxide removal (CDR) refers to the process of removing CO<sub>2</sub> from the atmosphere. Since this is the opposite of emissions, practices or technologies that remove CO<sub>2</sub> are often described as achieving “negative emissions.” The process is sometimes referred to more broadly as GHG removal if it involves removing gases other than CO<sub>2</sub>. There are two main types of CDR:
  - Enhancing existing natural processes that remove carbon from the atmosphere (e.g., by increasing its uptake by trees, soil or other “carbon sinks”).
  - Using chemical processes to, for example, capture CO<sub>2</sub> directly from the ambient air and store it elsewhere (e.g., underground).
- All CDR methods are at different stages of development and some are more conceptual than others, as they have not been tested at scale.

### **Adaptation/mitigation**

- Adaptation is the process of adjusting to current or expected changes in climate and its effects. Even though climate change is a global problem, its impacts are experienced differently across the world. This means that responses are often specific to the local context, and so people in different regions are adapting in different ways. A rise in global temperatures from the current 1°C above preindustrial levels to 1.5°C and beyond increases the need for adaptation. Despite many successful examples around the world, progress in adaptation is, in many regions, in its infancy and unevenly distributed globally.
- Different mitigation strategies can achieve the net emissions reductions that would be required to follow a pathway that limits global warming to 1.5°C with no or limited overshoot. All pathways use CDR, but the amount varies across pathways, as do the relative contributions of Bioenergy with Carbon Capture and Storage (BECCS) and removals in the Agriculture, Forestry and Other Land Use (AFOLU) sector. This has implications for emissions and several other pathway characteristics.

### **Sustainable development**

- Sustainable development seeks to meet the needs of people living today without compromising the needs of future generations, while balancing social, economic and environmental considerations. The 17 U.N. Sustainable Development Goals (SDGs) include targets for eradicating poverty; ensuring

health, energy and food security; reducing inequality; protecting ecosystems; pursuing sustainable cities and economies; and a goal for climate action (SDG13). Climate change affects the ability to achieve SDGs, and limiting warming to 1.5°C will help meet some of these targets. Pursuing sustainable development will influence emissions, impacts and vulnerabilities. Responses to climate change in the form of adaptation and mitigation will also interact with sustainable development with positive effects, known as synergies, or negative effects, known as trade-offs. Responses to climate change can be planned to maximize synergies and limit trade-offs with sustainable development.

- There are ways to limit global warming to 1.5°C above preindustrial levels. Of the pathways that exist, some simultaneously achieve sustainable development. They entail a mix of measures that lower emissions and reduce the impacts of climate change, while contributing to poverty eradication and reducing inequalities. Which pathways are possible and desirable will differ between and within regions and nations. This is due to the fact that development progress to date has been uneven, and climate-related risks are unevenly distributed. Flexible governance would be needed to ensure that such pathways are inclusive, fair and equitable to avoid poor and disadvantaged populations becoming worse off. Climate-resilient development pathways (CRDPs) offer possibilities to achieve both equitable and low-carbon futures.

## **ACTIONS OVERCOME DESPAIR**

The world is in a dire situation, but it is not hopeless. Our faith tradition offers many glimpses of hope persisting over despair. In ancient Israel, as Jerusalem was under siege and people were on the verge of exile, Jeremiah purchased a plot of land demonstrating a confidence in a better future (Jeremiah 32). The "Caring for Creation" social statement reads:

*"When Martin Luther was asked what he would do if the world were to end tomorrow, he reportedly answered, 'I would plant an apple tree today.' When we face today's crisis, we do not despair. We act."*



Here are some concrete and substantive actions that ELCA members, congregations or anyone can take.

### **PRAY.**

- We need to begin by turning to God in prayer, asking for direction of our thoughts and actions. In a statement following release of the IPCC report, the Lutheran World Federation called on its member churches to "pray for the fundamental conversion of hearts and minds to embrace sustainable lifestyles."<sup>9</sup> Prayer resources are available in the "Stewardship" and "Creation" sections of Evangelical Lutheran Worship as well as "Awakening to God's Call to Earthkeeping" on ELCA.org.<sup>10</sup>

### **RAISE AWARENESS and become educated on caring for creation.**

- Find resources such as "Why Lutherans Care for Creation: Building on Our Foundations" on the ELCA website at both [ELCA.org/resources/advocacy](http://ELCA.org/resources/advocacy) and [ELCA.org/Resources/Caring-for-Creation](http://ELCA.org/Resources/Caring-for-Creation).
- The ELCA is a member of the Blessed Tomorrow group, a coalition of diverse religious partners united as faithful stewards of creation. Find additional resources about protecting our shared home from [blessedtomorrow.org](http://blessedtomorrow.org).

**CONDUCT** Christian education or meetings where different aspects of climate change are discussed.

**CONSIDER** how your investments are being used.

- The Corporate Social Responsibility program in the ELCA includes tools for screening investments, shareholder advocacy and community investing. Resources and information are available from [ELCA.org/resources/corporate-responsibility](http://ELCA.org/resources/corporate-responsibility).
- Portico Benefit Services, a ministry of the ELCA, aims to steward fund investment “with an eye toward God’s work in the world.” Learn more about its “Investing for Social Impact” approach at [porticobenefits.org/Overview/ResponsibleInvesting/InvestingForSocialImpact](http://porticobenefits.org/Overview/ResponsibleInvesting/InvestingForSocialImpact).

**SEEK** opportunities to reduce your carbon footprint.

- The U.S. Environmental Protection Agency (EPA) sponsors the Energy Star Program for Congregations to help increase energy efficiency measures with multiple resources at

[energystar.gov/buildings/owners\\_and\\_managers/congregations](http://energystar.gov/buildings/owners_and_managers/congregations).

- Other EPA resources include a fun, one-sheet “Treasure Map” for worship facilities<sup>11</sup> and a “Showcase Dorm Room Guide.”<sup>12</sup> Check [ELCA.org/environment](http://ELCA.org/environment) periodically for additions and ways for you to take action.

**ENGAGE** with ELCA Advocacy.

- Plan a break trip: Take an educational break in Washington, D.C., and get trained by staff to lobby and advocate on issues you care about.
- Virtual training: Reach out to [washingtonoffice@ELCA.org](mailto:washingtonoffice@ELCA.org) to set up a virtual training that includes policy information and guidance on organizing in-district meetings with your legislators.
- Advocacy network: Join ELCA Advocacy’s Action Network at [ELCA.org/advocacy/signup](http://ELCA.org/advocacy/signup) and get direct emails that provide resources and calls to action that will help you engage legislatively and regulatorily.

NOTES:

<sup>1</sup> <http://www.ipcc.ch/report/sr15/>

<sup>2</sup> <http://download.elca.org/ELCA%20Resource%20Repository/EnvironmentSS.pdf>

<sup>3</sup> Findings of the U.S. Global Change Research Program Climate Science Special Report, <https://science2017.globalchange.gov/>, last assessed 10/23/18 and Global Climate Change: Vital Signs of the Planet”, <https://climate.nasa.gov/causes/>, last assessed 10/23/18.

<sup>4</sup> IPCC Press Release, [http://www.ipcc.ch/pdf/session48/pr\\_181008\\_P48\\_spm\\_en.pdf](http://www.ipcc.ch/pdf/session48/pr_181008_P48_spm_en.pdf), last assessed 10/23/18 and PCC 2018 Report on Global Warming of 1.5oC, <http://www.ipcc.ch/report/sr15/>, last assessed 10/23/18.

<sup>5</sup> Decision 1/CP.21 preamble.

<sup>6</sup> Paris Agreement, [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf).

<sup>7</sup> Ibid, Decision 1/CP.21, paragraph 21.

<sup>8</sup> [http://report.ipcc.ch/sr15/pdf/sr15\\_spm\\_final.pdf](http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf)

<sup>9</sup> <https://www.lutheranworld.org/news/climate-justice-time-ramp-efforts>

<sup>10</sup> <https://www.elca.org/en/Resources/Caring-for-Creation>

<sup>11</sup> [https://www.energystar.gov/buildings/tools-and-resources/energy\\_treasure\\_map\\_worship\\_facilities](https://www.energystar.gov/buildings/tools-and-resources/energy_treasure_map_worship_facilities)

<sup>12</sup> [https://www.energystar.gov/index.cfm?c=news.nr\\_dormroom](https://www.energystar.gov/index.cfm?c=news.nr_dormroom)